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A study was conducted to determine the effectiveness of simulation for presenting critical teaching problems and the effect of exposure to simulated critical teaching problems on student teachers. The study had three major phases: (1) identification of critical teaching problems, (2) development of a simulated fifth grade situation, and (3) testing the effects of the simulation experience on student teaching. Phase 1 was accomplished using a self-report instrument with 163 of the 282 first-year graduates of State University College at Brockport, N.Y. A chi square analysis of the 117 items yielded 32 significant problems. In phase 2, the 32 problems were developed into incidents which were presented through video tapes, role plays, and written materials; a schedule for presenting incidents and a problem solving method were also developed. In phase 3, a pre-posttest control group design was used to measure the effects of simulation. Two samples of 40 participants were selected randomly from education students at State University College. It was found that simulation involves and motivates students, actual teaching problems will be less numerous for students receiving simulation training, and simulation is at least as effective as an equal amount of student teaching. (Appended are a 523-item bibliography and materials used in the study.) (Author/SG)

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THE SIMULATION AND ANALYSIS OF PROBLEMS OF BEGINNING TEACHERS

Project No. 5-0798
Contract No. USOE-22-6000A

Donald R. Cruickshank
The University of Tennessee
Knoxville, Tennessee

Frank W. Broadbent
Drake University
Des Moines, Iowa

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New York State University College
Brockport, New York

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CHAPTER I

INTRODUCTION

The professional sequence in the usual teacher education program exposes education majors to available knowledge in the fields of curriculum and instruction, child growth and development, and the organization of education in the United States and has peripheral concern for evaluation, audio visual materials and techniques, educational philosophy and history and usually culminates in student teaching.

Such curricular arrangements assume that the education student will transfer the talk about education to his teaching. As LaGrone points out, however, "The recent research in teaching and work in theory indicates that this is an extremely difficult task and that an assumption of this magnitude is more likely to be false than true."[1]

What seems to be needed is an "integrative stem" which will enable teacher educators and their students to wed theory and practice. This study is an effort to determine whether the technique of simulation meets that need.

I. STATEMENT OF THE PROBLEM

Broadly stated the purpose of the study ~~was to~~ (1) examine the training technique of simulation in order to judge its effectiveness for presenting critical teaching problems and (2) determine whether or not exposure to simulated critical teaching problems has any observable effect on the participant's teaching behavior.

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[1] Herbert LaGrone, "A Proposal for the Revision of the Pre-service Professional Component of a Program of Teacher Education" (Washington, D.C.: American Association of Colleges of Teacher Education, 1964), p. 63.

II. ANALYSIS OF RELATED STUDIES

Literature on Simulation

Simulation may be defined as the creation of realistic models to be operated by participants in order to provide them with problem-solving experiences related to their present or future work. Such game experiences require each participant to make decisions based upon previous training and available information. After decisions are made, the participant is provided with an opportunity to see and/or discuss one or more possible consequences that may result.

The use of simulation in training is not new. The technique probably is best known from the use of the Link Flight Trainer developed during World War II. Since that time, flight trainers have become increasingly sophisticated. For example, Eastern Airlines employs a simulator of the Boeing 727 jet which is married to a digital-type electronic computer.

Other areas of the business sector have made sizeable investments in simulation as a training device. The American Management Association has developed and refined a "Top Management Decision-Making Game" while Harvard University has created a "Harbits Company" wherein future corporation vice presidents practice "constructive failure." In each case the technique allows participants the luxury of making professional errors without the often harsh real-life consequences.

In education, simulation seems to have been first employed successfully in programs of driver training. One such example is described by Richards.

> The driving compartment of an automobile is duplicated. . . . It is a single unit which is equipped with an accelerator, brake pedal, steering wheel, gear shift, directional signal, horn button, light switch, headlamp. . . . All of these controls are electronically connected to the master unit so that the instructor may record on a continuous score card, the action of the controls. . . .
>
> Driving situations to which the students react are flashed on a screen in front of the car simulator. The motion picture film confronts the students with such operations as steering through complicated situations, parallel parking, etc. . . .[2]

Guetzkow has produced simulation materials which appear to be promising for teaching basic concepts of balance of power, sovereignty, and international law.[3] Using these materials at Lawrence, Kansas, Cherryholmes has involved college preparatory students in a six-week simulation game in international relations. In this project three students are assigned to each nation occupying positions of Central Decision Maker, Chief Diplomat, and Military Advisor. These roles are defined as follows:

> The Central Decision Maker has the final authority to determine the policies of his nation. The Chief Diplomat is the only official who may conduct oral negotiations with other nations, and the Military Advisor is responsible for

---

[2] William T. Richards, "Simulation: What Is It and What Does It Offer?" Wisconsin Journal of Education, April 1964, p. 12.

[3] Harold Guetzkow (ed.), Simulation in Social Science Readings (New Jersey: Prentice-Hall, Inc., 1962).

> maintaining the military posture of his nation and for securing accurate information concerning the military strength and intentions of other nations.[4]

As a result of the actual gaming run in the spring of 1963, students were exposed to the realities as well as the concepts of military aggression, collective security, United Nations, balance of power, isolationism, and postwar settlement.

In the late 1950's, University Council for Educational Administration in its Development for Criteria Study, simulated the administrative position in the public elementary school.[5] The simulation materials, through films, filmstrips, tape recordings and printed material introduce each participant to Jefferson Township and the Whitman Elementary School. Following orientation, each participant assumes the role of Marion Smith, principal, and attacks problems like the following directive which appears in his in-basket.

> Dear Marion:
>
> I thought you should know that at this time of the school year, it is customary for our principals to encourage membership in the Jefferson Teachers Association.
>
> I hope that you will plan to stress the activities of the Association, devoted to the welfare of our teachers and concerning itself with many of the problems faced in the teaching situation.
>
> I look forward to your cooperation in this matter.
>
> E. Andrew Donnelly
> Superintendent of Schools

---

[4] Cleo Cherryholmes, "Developments in Simulation in International Relation in High School Teaching," Phi Delta Kappan, January 1965, pp. 227-31.

[5] John Hemphill, *et al*., *Administrative Performance and Personality* (New York: Teachers College, Columbia University, 1962); University Council for Educational Administration, *Simulation in Administrative Training* (Columbus, Ohio: The Council, 1960.

Presently the University Council for Educational Administration is expanding simulation materials for wider use in administrator training. Of the simulation materials available in education, these materials seem to have had the greatest use and impact to date.[6]

A more recent application of simulation is in the work done by Kersh and his associates at Oregon who have constructed a "classroom simulator."[7] In this project, multiple projection techniques are used to present participants with episodes occurring in Mr. Land's sixth grade. The participant reacts to each episode and in turn is shown a possible consequence of his decision as another short film projects the pupils' predicted reaction.

Simulation materials have been developed by Dunlop[8] at The University of Missouri for use in counselor training. Participants in this game play out the role of the guidance counselor at Middle Strata High School. The incidents faced by the simulated counselor are typical of the kinds of duties counselors actually perform. To aid the "counselor" in reaching decisions, grade point averages, master schedules, and behavioral journals are made available.

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[6] Morris J. Weinburger, "The Use of Simulation in the Teaching of School Administration" (unpublished Doctoral dissertation, Teachers College, Columbia University, 1965).

[7] Bert Y. Kersh, Classroom Simulation: A New Dimension in Teacher Education (Training Research Division, Oregon System of Higher Education: Title VII NDEA, 1963).

[8] Richard S. Dunlop and Ben C. Hintergarat, "The Counselor's Week: A Simulation Program for Counselor Trainees" (Kansas City: The University of Missouri, 1966). (Mimeographed.)

Pierson and Sherts[9] of San Diego County Department of Education have produced the Life Career Game for use with sixth grade students. The game is described as an activity which requires pupils to simulate some of the decisions a person would need to make as he progressed through school, prepared for a job, and entered marriage and family life. The purpose of the game is to give pupils some understanding of educational and career choices and to provide them with experiences in planning for their own future.

Underlying the use of simulation is the hypothesis that transfer of training occurs, i.e., that practice in solving life-like problems of flying or making executive decisions should have a positive effect upon one's behavior on the job. This hypothesis is supported in some measure in several studies made in the aircraft industry and in education.[10]

Further analyses of the above studies using simulation in education reveal the following:

Kersh found that students who underwent simulation training were ready to assume full responsibility during student teaching up to three weeks earlier than a control group not having such training.[11]

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[9] Glen Pierson and Garry Sherts, Life Career Game (San Diego: San Diego County Department of Education, n.d.).

[10] Richard W. Bishop, "Questions and Answers about Driving Simulator" Safety Education, December 1964, p. 9; Robert B. Hayes, "Simulation in Driver Education," N.E.A. Journal, April 1965, p. 58; Bert Y. Kersh, Classroom Simulation: Further Studies on Dimensions of Realism (Training Research Division, Oregon Systems of Higher Education: Title VII NDEA, Project 5-08480, 1965); Charles W. Vlcek, "Assessing the Effect and Transfer Value of a Classroom Simulator Technique," (unpublished doctoral dissertation, Michigan State University, 1965); Weinburger, loc. cit.

Vlcek found that simulation increases the participant's confidence in his ability to teach.[12] Weinberger reported that participants felt their behavior on the job was modified positively as the result of the simulation experience.[13] In addition these studies indicated that participants considered the simulated experiences stimulating and highly motivating.

Literature on Critical Teaching Problems

A second and complementary concern of the study was to identify critical teaching problems which, in turn, would be simulated. A review of the related literature revealed that although numerous follow-up studies of teacher graduates had been conducted, most were simple surveys so limited in number of respondents involved or by procedures employed that they offered little guidance or assurance. A few studies, however, are worthy of being reported.

Teachers in Wey's investigation[14] reported eight problem categories in the following order of severity: discipline, adjusting to deficiencies in school equipment and materials, adjusting to additional non-teaching duties, providing for individual differences, motivating, keeping records and reports, methodology of teaching, and relations with superordinates.

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[11] Kersh, loc. cit.

[12] Vlcek, loc. cit.

[13] Weinberger, loc. cit.

[14] Herbert W. Wey, "Difficulties of Beginning Teachers," School Review, January, 1951, pp. 27-32.

Lambert's teachers reported problems in keeping records and reports, finding out about and using special services of the school, understanding school goals, planning for and working with exceptional children, discipline, and understanding and using courses of study and curriculum guides.[15]

In a more recent study, Piper[16] enumerates teaching problems in three broad areas--diagnosis and remediation of learning difficulties, discipline, and evaluation. Problems in the last two studies were not reported by weight.

When comparing the results of studies such as the above, it is obvious that lack of agreement exists in terminology which inhibits generalization by an investigator. However, it is clear that discipline is reported as a problem in each study. It may also be said with some assurance that aspects of "methodology" (e.g., motivation, diagnosis, and remediation) and providing for individual differences are difficult problems for teachers.

It is of interest to note that in the majority of the problem areas identified by teachers, little, if any, help is provided in the usual pre-service programs. The help which is provided is rarely problem-centered since problems generally are not the whetstones of teacher education classes.

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[15] Sam H. Lambert, "Beginning Teachers and Their Education," Journal of Teacher Education, December 1956, pp. 347-61.

[16] Evelyn Piper, "An Evaluation of the Undergraduate Elementary Education Program at the University of Oregon Based on the Opinions of Graduates" (unpublished Doctoral dissertation, University of Oregon, 1960).

III. STATEMENT OF HYPOTHESIS

Since it can be assumed that teachers face identifiable teaching problems and that these problems may exist at least in part because teacher education courses are not able adequately to present students with such problems, it is suggested that these problems be identified and simulated for presentation to would-be teachers to determine what effect, if any, the presentation of critical teaching problems and the subsequent analysis thereof has upon teaching behavior.

The hypothesis to be tested is stated as follows:

If student teachers are given pre-service opportunities to encounter, analyze, and attempt to solve identifiable critical problems of beginning teachers

(C_1) then, such problems will be less numerous than if they are not so encountered;

(C_2) then, general teaching performance will be improved;

(C_3) then, they will develop more positive feelings toward persons and concepts related to such problems;

(C_4) then, they will be more confident as student teachers;

(C_5) then, they will be able to assume full-time responsibility for student teaching sooner.

IV. DEFINITION OF TERMS

Several terms need to be defined as they are used in the study.

Critical teaching problems are those teaching problems submitted by the first year teachers which were found to be statistically significant.

First year teachers are those who submitted teaching problems they encountered during their initial year of teaching using a self-report instrument.

Simulation is defined as a life-like program used to present critical teaching problems to the beginning teachers.

Simulated classroom was that fifth-grade classroom which was created in order to provide a setting wherein the critical teaching problems would be reproduced through simulation.

CHAPTER II

METHOD OF ATTACK

I. SAMPLE USED FOR DETERMINING CRITICAL TEACHING PROBLEMS

The initial phase of the study was concerned with the identification of critical teaching problems. It was decided that such problems would be sought from first-year teachers since their problems most likely would be related to omissions or failures of the pre-service program and beginning teachers would have had less time to find adequate solutions for them.

The sample chosen for the study was not randomly selected from the population of first-year teachers. Instead of a random selection of first year teachers, the sample was comprised of the 1964 graduates of the State University College at Brockport, New York. The results then should not be generalized to the population of first year teachers. Such a procedure was employed since the later experiment would be conducted with pre-service students in that institution. It was assumed that the 1964 graduates were not significantly different nor was their preparation different from the experimental group.

For a chronology of a few of the early activities undertaken in the study see Appendix A.

II. INSTRUMENT USED FOR DETERMINING CRITICAL TEACHING PROBLEMS

In order to determine the problems perceived by State University College at Brockport graduates, an inventory was devised based upon earlier work done by Dropkin and Taylor,[1] Smiley and Sprague,[2] and Seymour Lemeshow.[3] The Perceived Problem Inventory or PPI (see Appendix B) contained 117 items categorized into seven areas as follows: discipline, evaluation, methods, parent relations, personal, planning and materials, and routines. The items were arranged in random fashion. Test-retest reliability of the instrument when used with a graduate class of education students was .96.

The "Perceived Problems Inventory" (PPI) was mailed May 1, 1965, to the 282 elementary and secondary school education majors who had graduated in June of 1964. The respondents, therefore, had nearly completed one year of teaching in public schools largely in New York State. One hundred sixty-three replies or 58 percent of the questionnaires were returned in time for the necessary subsequent analysis.

III. ANALYSIS OF PPI

The original four-point scale on the PPI was reduced to a two-point scale (problem-no problem) to compensate for possible respondent reluctance to admit the degree of severity of problems. Results were placed into problem and no problem categories and subjected to chi square analysis, as shown by Table I. Significance is reported at the .01 level.

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[1] Stanley Dropkin and Marvin Taylor, "Perceived Problems of Beginning Teachers and Related Factors," Journal of Teacher Education, December 1963, pp. 384-90.

[2] Marjorie B. Smiley and Arthur R. Sprague, Professional Difficulties of Beginning Elementary School Teachers as Seen by Elementary School Principals, Study No. IV (New York: Office of Institutional Research, Hunter College, November 1957.

[3] Seymour Lemeshow, "Teacher Operational Problems Identification: Problems Questionnaire Raw List" (New Jersey: Jersey City State College, July 1964).

In all, thirty-two problems were significant at the .01 level. When an arithmetic weighting method was applied to the significant problems, using the four original PPI scale units the order of problem difficulty resulted which is shown in Table II, pages 21-22.

IV. PREPARATION TO SIMULATE THE CRITICAL TEACHING PROBLEMS

One of the major difficulties in simulating the problems from PPI problem statements was determining what the expression of each problem meant to the respondents. For example, what specific incident in the teaching day was related to "involving many children in group discussion"? The project staff sought the help of classroom teachers whenever some doubt existed over the possible meaning of such problem statements.

No attempt was made to present a problem in any special way; rather, each problem was reproduced using the most effective technique--either as a filmed incident, a role playing situation or a written incident. In all, ten critical teaching problems (10, 18, 31, 42, 48, 50, 76, 79, 85, 91) were best suited for filmed incidents, five (5, 22/30, 38, 67, 90) were developed for role playing, and sixteen were prepared as written incidents. Two problems, 22 and 32, "not knowing how to evaluate my objectives" and "judging children's progress in terms of my aims and

TABLE I

CHI-SQUARE TEST

Reported Problems	X^2 $X_1^2 + S_1^2$	Significance[a]
1. Having children follow routines for entering and leaving the classroom when coming from home or leaving for home.	1.09	No S
2. Lacking enthusiasm for a subject.	53.10	S
3. Needing help in selecting instructional materials.	21.84	S
4. Working out a daily schedule.	4.09	No S
5. Discussing with parents their children's achievement.	21.00	S
6. Explaining my grading system to children.	10.19	No S
7. Having students see relationship between undesirable behavior and the consequences.	33.66	S
8. Not really liking kids.	77.39	No S
9. Managing the distribution and collection of materials, paper, milk, etc.	27.77	No S
10. Involving many of the children in group discussions.	35.73	S
11. Finding films and film strips related to the area being studied.	15.64	S
12. Getting students to do homework.	35.69	S
13. Criticized by parents.	29.50	No S
14. Collecting anecdotal background information about students.	1.95	No S
15. Maintaining order during field trips.	4.53	No S

TABLE I (continued)

Reported Problems	$\frac{X^2}{X_1^2 + S_1^2}$	Significance
16. Unhappy teaching in lower socio-economic district.	40.27	No S
17. Keeping pupil attendance records accurately.	6.90	No S
18. Not knowing what to do with students who finish early.	84.91	S
19. Finding out about radio and T.V. programs related to daily classwork of my children.	1.02	No S
20. Planning and executing useful field trips.	1.79	No S
21. Bothered by parents telephoning.	36.47	No S
22. Not knowing how to evaluate my objectives.	8.86	S
23. Students not respecting me.	35.45	No S
24. Disturbed by school regulations.	1.23	No S
25. Ordering, securing, and accounting for supplies and equipment.	7.43	S*
26. Too much stress on grades for motivation.	16.89	S*
27. Integrating A-V materials into the lessons.	1.07	No S
28. Working out details of assembly programs.	3.04	No S
29. Talking with parents I wish to contact.	6.58	No S
30. Judging children's progress in terms of my aims and purposes.	27.50	S
31. Having children maintain quiet while working independently.	48.38	S
32. Feelings of insecurity.	.23	No S
33. Managing the transition from one activity or subject to another.	.47	No S

TABLE I (continued)

Reported Problems	$\overset{X^2}{X_1^2 + S_1^2}$	Significance
34. Relating the subject meaningfully to children.	25.83	S
35. Finding appropriate reading materials for readers one or more years below grade level.	21.65	S
36. Finding out what content I am supposed to cover in my grade.	.05	No S
37. Establishing a rapport with parents so that they will provide information candidly and without embarrassment.	1.63	No S
38. Feeling uncomfortable about giving failing grades.	36.64	S
39. Finding ways to integrate isolated, disliked children in group activities.	46.06	S
40. My feelings being hurt by criticism.	3.10	No S
41. Organizing an orderly procedure for children to hang up their wraps.	45.22	No S
42. Not knowing how to deal with reading problems.	55.46	S
43. Being unable to complete a lesson.	.11	No S
44. Helping parents understand the reporting system of my school.	2.74	No S
45. Involving pupils in self-evaluation.	18.93	S
46. Knowing how to hold student conferences.	2.16	No S
47. Unhappy about teaching at this present grade level.	26.50	No S
48. Unhappy with routine classroom bookkeeping.	9.50	S
49. Being afraid to teach controversial subjects.	6.88	No S

TABLE I (continued)

Reported Problems	X^2 $X_1^2 + S_1^2$	Significance
50. Having work for some children while I am working with other groups or individuals.	32.87	S
51. Difficulty in identifying those who need remedial help.	.82	No S
52. Feeling unpopular as a teacher.	26.52	No S
53. Not wanting a certain student in my class.	1.84	No S
54. Formulating questions that provoke discussion.	3.40	No S
55. Needing to know how to organize a unit of work.	2.31	No S
56. Identifying children in need of psychological testing or counseling.	1.31	No S
57. Having difficulty with grouping.	1.72	No S
58. Having activities ready for children's rest time periods.	11.21	No S
59. Bothered by frustration in my personal life.	8.73	S*
60. Not really knowing how to teach.	19.96	No S
61. Unhappy about teaching slow learners.	3.07	No S
62. Difficulties with organizing supplies and materials.	3.26	No S
63. Introducing a new topic and obtaining high interest.	7.93	S
64. Obtaining the materials for making my own teaching materials, e.g., construction paper.	4.84	No S
65. Having difficulty preparing lesson plans.	20.28	No S
66. Conducting an interview with a parent.	1.24	No S

TABLE I (continued)

Reported Problems	X^2 $X_1^2 + S_1^2$	Significance
67. Having trouble interpreting children's capabilities to parents.	17.50	S
68. Handling cliques in the classroom.	2.31	No S
69. Not being accepted by my colleagues.	78.09	No S
70. Handling children in passing in hall from room to room.	8.73	No S
71. Differentiating instruction among the slow, average and gifted children in class.	21.84	S
72. Constructing bulletin boards.	.001	No S
73. Finding out what the objectives of education are for my grade.	2.93	No S
74. Helping a student with a destructive home situation.	49.67	S
75. Being able to prepare classroom tests that are valid.	35.70	S
76. Handling children's aggressive behavior toward one another.	41.75	S
77. Feelings of inferiority.	19.50	No S
78. Organizing procedures for moving as a class from place to place.	10.76	No S
79. Students not willing to work.	94.83	S
80. Finding materials with which to prepare simple science demonstrations.	1.02	No S
81. Lacking understanding of my subject(s).	.18	No S
82. Explaining my techniques of teaching to parents.	11.84	No S
83. Interpreting the results of standardized tests.	.08	No S

TABLE I (continued)

Reported Problems	X^2 $X_1^2 + S_1^2$	Significance
84. Handling children who waste school materials.	1.01	No S
85. Being impatient with my students.	18.94	S
86. Teaching in an area for which I am unprepared.	1.37	No S
87. Unable to operate A-V equipment.	19.50	No S
88. Parents complaining about homework assignments.	37.35	No S
89. Getting parents to take an interest in their children's behavior.	30.12	S
90. Telling parents that their children have problems.	28.36	S
91. Handling the constantly disrupting child.	84.27	S
92. Being unable to tolerate student errors.	4.84	No S
93. Having difficulty with written communication.	14.59	No S
94. Finding out about community resources that I can use in my teaching.	.38	No S
95. Finding out what content children in my class covered last year.	.50	No S
96. Being troubled with parental complaints.	35.09	No S
97. Using test results and anecdotal information in working with individual children.	3.92	No S
98. Needing more understanding of student behavior.	2.84	No S
99. Being unable to adjust to certain ethnic groups.	64.44	No S
100. Using the committee method with children.	3.25	No S
101. Not understanding the value of a plan-book.	41.47	No S

TABLE I (continued)

Reported Problems	X^2 $X_1^2 + S_1^2$	Significance
102. Enlisting parent aid for activities such as trips, making costumes for a play, or class mother.	49.69	No S
103. Being required to grade on a curve.	40.86	No S
104. Working with overly dependent children.	4.03	No S
105. Bothered by feelings of loneliness.	44.75	No S
106. Having difficulty with oral communication.	14.88	No S
107. Planning segments of work for a week or longer.	.34	No S
108. Having a distaste for grading papers.	30.28	S
109. Being afraid of some of my students.	81.39	No S
110. Bright students make me feel uncomfortable.	56.27	No S
111. Unable to maintain pupil interest.	1.84	No S
112. Lacking know-how for pupil-teacher planning.	.016	No S
113. Having trouble controlling class.	3.52	No S
114. Inability to keep up professionally in my field.	3.69	No S
115. Not being prepared to teach under newer instructional organization (e.g., team teaching).	6.92	No S
116. Having difficulty organizing my work.	2.94	No S
117. Feeling nervous when supervised.	13.90	S

[a] 6.64 needed for significance at .01.

Problems identified with asterisks are significantly not problems.

TABLE II

SIGNIFICANT CRITICAL TEACHING PROBLEMS REPORTED BY WEIGHT

Problem Order by Weight	Problem Number from PPI	Critical Teaching Problem
1)	91	Handling the constantly disrupting child.
2)	79	Students not willing to work.
3)	42	Not knowing how to deal with reading problems.
4)	74	Helping a student with a destructive home situation.
5)	18	Not knowing what to do with students who finish early.
6)	108	Having a distaste for grading papers.
7)	31	Having children maintain quiet while working independently.
		Integrating the isolated disliked child.
9)	7	Having students see relationship between undesirable behavior and the consequences.
10)	71	Differentiating instruction among the slow, average and gifted children in class.
11)	11	Finding films and film strips related to the area being studied.
12)	89	Getting parents to take an interest in their children's behavior.
13)	76	Handling children's aggressive behavior toward one another.
	50	Having work for some children while I am working with other groups or individuals.
15)	35	Finding appropriate reading materials for readers one or more years below grade level.
	5	Discussing with parents their children's problems.

TABLE II (continued)

Problem Order by Weight	Problem Number from PPI	Critical Teaching Problems
17)	2	Lacking enthusiasm for a subject.
	90	Telling parents that their children have problems.
19)	38	Feeling uncomfortable about giving failing grades.
20)	3	Needing help in selecting instructional materials.
21)	12	Getting students to do homework.
	30	Judging children's progress in terms of my aims and purposes.
23)	10	Involving many of the children in group discussions.
24)	117	Feeling nervous when supervised.
25)	48	Unhappy with routine classroom bookkeeping.
26)	34	Relating the subject meaningfully to children.
27)	29	Talking with parents I wish to contact.
	45	Involving pupils in self-evaluation.
29)	85	Being impatient with my students.
	75	Being able to prepare classroom tests that are valid.
31)	67	Having trouble interpreting children's capabilities to parents.
32)	22	Not knowing how to evaluate my objectives.

objectives" were combined since the statements did not appear to be significantly different in meaning. It was decided to simulate each problem as it might occur in a fifth grade. Fifth grade was selected because it was an intermediate grade and because ten-year-olds would be able to role play parts for the filmed incidents.

V. SELECTING THE SCHOOL DISTRICT SCHOOL AND CLASSROOM TO BE SIMULATED

Since the simulated problems were to occur in a life-like setting, a school district had to be created. To invent a completely mythical school with all the detail necessary was considered beyond the scope of the project. Instead it was decided to adapt a real school and real school materials to the purpose of the study. The following several criteria were established in order to guide the search for a school which was to serve as the prototype:

1. The school was to be located in a middle class community but one which contained families from a cross section of socio-economic and ethnic backgrounds.
2. The school was to be in a school system which provided a good educational program and service for children.
3. The school should be located in a vital and growing community.
4. The school should be in a district which drew on both rural and urban-like areas.
5. The school should be considered a "good school" by the community and by school officials of other communities.

6. The school and community should be relatively easy to disguise.
7. The school should be in district where a high level of morale existed.

The identity of the particular school selected is unimportant to the study and is best not revealed since the problems simulated had no direct connection with that particular school, its program, parents, or pupils. Rather the simulated critical teaching problems could and do occur in any school setting. The problems were imposed on that school only in order to carry out the study. From this point on the school will be referred to as Longacre.

VI. PREPARATION OF SCHOOL BACKGROUND MATERIALS

It was felt that several kinds of background materials were needed as follows: (1) those which would provide the participants with an introduction to the school community and the Longacre School, and (2) those which would be available and useful to a teacher at Longacre in coping with the critical teaching problems. In both cases it was important that the materials provided useful information which might be drawn upon in order to facilitate later decision making. Also, the material, in a sense, had to present a school and school district philosophy within which each participant could work comfortably. Finally, the materials needed to be constructed in such a way that they would help each participant to feel as if they were directed to him thus facilitating role assumption.

Information about the school community was collected from a number of sources including among others brochures developed by the town government, a school district report prepared as part of a high school accreditation study, and a brochure prepared for recruiting teachers.

Among the significant points to be conveyed about the community and the school district were the following:

1. The town of 70,000 citizens was the fastest growing in the county.
2. The town was located between a large industrial center with many educational points of interest and a rural area of isolated farmlands.
3. Most of the town's inhabitants commuted to work in the nearby city.
4. The school system was growing rapidly in order to keep pace with town growth.
5. The town contained people from a variety of national and religious origins.
6. The citizens had great faith in the school system and had high educational aspirations for their children.
7. Money was made available to the schools in order to provide good teachers and to make instructional materials and services available.

The above information was woven into the script (see Appendix C) for a filmstrip of twenty-seven frames. The filmstrip was called "Spotlight on Education in Monroe." Pictures were taken by members of the project staff and a member of the Instructional Materials Center at State University College at Brockport. Some pictures were provided by the school district personnel office from a file used primarily for recruitment of teachers. A magnetic recording was made narrated by the simulated school district superintendent, Dr. Raymond Black.

A similar filmstrip (Appendix D) with a narrative by the simulated principal, Frank Jones, was made to present information about Longacre School. The 50 frame filmstrip "Welcome to Longacre School" contained the following information:

1. Longacre is a 600 pupil K-6 school.
2. Longacre is located in the oldest section of town in a densely populated neighborhood.
3. Only limited bus scheduling is needed since most children live within walking distance of the school.
4. Many of the children lived in homes where both parents work.
5. Longacre teachers are urged to provide many child-directed activities such as group projects, discussions, etc.
6. The school district provides special teachers to provide instruction in art, vocal and instrumental music, library and physical education.
7. Longacre also has diagnostic and remedial personnel in psychology, speech, reading, health and dentistry.
8. A school supervisor is assigned to work with teachers to improve instruction.
9. Enrichment activities are scheduled for the children after school.
10. Parents give the school strong support and have high interest in the school program.

The second category of background materials has been identified as those items which would be available and useful to a teacher at Longacre in solving the critical teaching problems. These materials normally form the most important part of a teacher's professional classroom file.

Cumulative record cards were constructed for a classroom of thirty-one children. In actuality, data about real children in a real classroom were used but changed significantly to insure the anonymity of the children and their families. Each record card contained the following:

1. Family data and home conditions
2. Attendance information
3. Test data
4. Child's picture
5. Final report card marks in grades 1-4
6. Remarks made by teacher following parent-teacher conferences
7. Teacher remarks regarding unusual or significant behavior
8. Child's special interests and outside activities.

Get acquainted cards were intended to serve as a quick reference for getting to know the students. They contained name, address, telephone number, age, special classes (e.g., orchestra), a brief comment by last year's teacher and the achievement record of that child in several subjects at the close of fourth grade.

Two sociograms were made in the classroom representing the simulated classroom. One asked the children to "Name three children in your classroom whom you would most like to sit next to." The second requested, "Name three children in your classroom whom you would least like to sit next to." When the sociograms were given to the participants they were told that they were always current for each problem. Obviously that would not be the case in reality but no alternative seemed feasible.

Faculty Handbook of the school which was simulated was revised in order to become the handbook employed at Longacre. It contained the usual faculty roster, special subject schedules, and rules and regulations which were intended to guide behavior of teachers and students as well as to provide information of a more routine nature.

The Curriculum Handbook was an adaptation of the real one employed in the district which served as the prototype. It contained suggested learning experiences for children in grades K-6 in the academic areas. It was not unlike typical courses of study available in most progressive school districts.

The Pupil Personnel Services Manual also was adapted. It defined the roles of such special professional people as school social workers, psychologists and others who were available to assist teachers and students in the district.

The Audio Visual Manual which contained a listing of records, filmstrips, film and slide sets was used with few changes.

The class roster was composed which contained the names of the thirty-one children in the simulated classroom.

Finally, a name tag using the name Pat Taylor was made to be placed on the desk of each participant. The name Pat was selected so that either a male or female could assume the role of the beginning fifth grade teacher at Longacre.

VII. DEVELOPING THE FILMED CRITICAL TEACHING INCIDENTS IN THE CONTEXT OF THE LONGACRE SCHOOL

Although scripts had been written for the ten critical teaching problems to be presented on film, no one yet had been assigned to play roles in those visual problems. Subsequently arrangements were made for children and teachers in the Campus Demonstration School of the State University College at Brockport, New York, to participate in the filming. It was decided that television would be used initially to produce video tapes of each problem and then to convert the tapes to 16 mm. film. The use of video tape provided great flexibility and enabled the staff to make maximum use of time and materials. The college had had considerable experience in using this medium and the children had been in front of television cameras since they had entered four-year-old nursery school there. They had no difficulty assuming the role of students in Pat Taylor's fifth grade. On the average, four hours of rehearsal and actual filming went into the construction of each filmed incident. Since different children participated in different incidents this did not disrupt the classroom learning environment as much as one might expect. In all the filmed incidents, children continued to work on their school studies while the incidents took place.

Three of the ten filmed incidents were of teachers in the Longacre School. Enough teachers who in the past had enjoyed working with television as a medium of instruction were eager to participate. These incidents varied in length from less than one minute to ten minutes with four minutes being the approximate average time.

VIII. DESIGN FOR THE STUDY

In order to test the hypothesis and projected consequences, the following randomized control group pretest-post test design was employed.

$$\begin{array}{llll} R & O_1 & X & O_2 \\ R & O_3 & & O_4 \end{array}$$

The X or treatment used was the simulation experience henceforth referred to as the simulator.

Since the experimental design was to be employed twice, in the fall and later in the spring, two samples of forty participants each were selected randomly from the two pools of elementary and early secondary majors attending State University College at Brockport, New York. One pool from which forty students were selected was made up of those students who would be eligible for student teaching in September 1966. The second pool was composed of students who would be student teaching beginning February 1967.

Twenty students from each sample were assigned randomly to experimental and control groups respectively. (A complete list of experimental subjects is contained in Appendix E.) Comparisons of grade point averages were used to assure randomization. On this criterion there was no significant difference among the groups. All participants later were randomly assigned to supervising teachers who would work with them during student teaching.

Generally both fall and spring experimental groups reported for simulation training in lieu of their first two weeks of student teaching. Control groups went as scheduled to their student teaching assignments. The experimental groups reported to a specially prepared room at the Campus Demonstration School in Brockport. A diagram of the room is presented in Figure 1.

IX. ESTABLISHING THE ASSESSMENT SCHEDULE

In order to test the hypothesis and the following consequences several instruments were obtained or constructed.

Consequence 1 that a reduction in problems would occur was examined using the earlier described Perceived Problems Inventory--PPI (Appendix B).

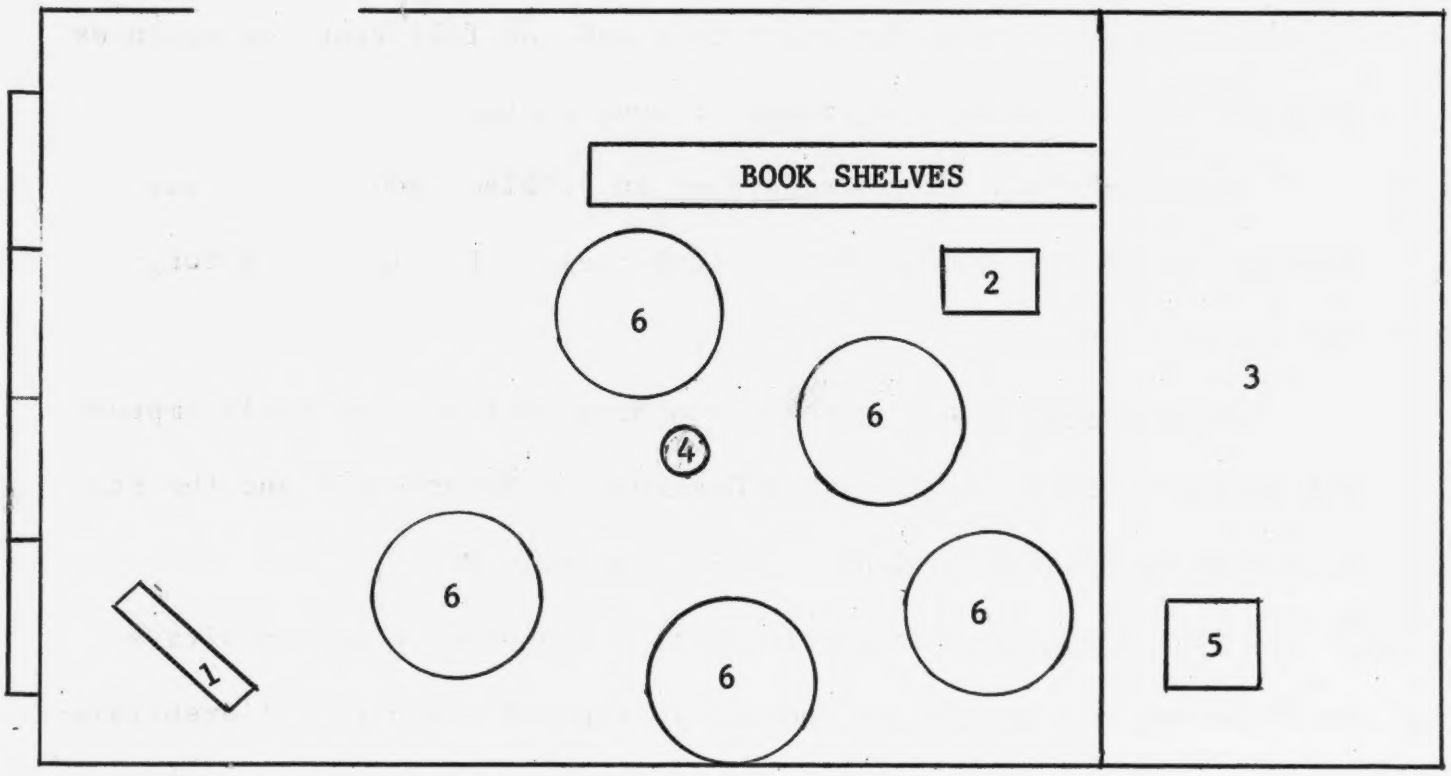
Consequence 2 that general teaching performances would improve was measured using the Classroom Observation Record--COR and the Student Teacher Evaluation Report--STER (Appendix F).

Consequence 3 that participants would develop more positive feelings was measured using specially prepared semantic differentials--SD (Appendix G) and the Minnesota Teacher Attitude Inventory--MTAI.

Consequence 4 that participants will be more confident as teachers was determined by employing a Confidence Scale--CS (Appendix H).

Consequence 5 that participants would assume full-time responsibility for student teaching sooner was examined using a card--AFR submitted by the supervising teacher indicating the date when the student teacher did or could have assumed full responsibility for the classroom.

General reaction was obtained to the simulator using the Reactions to Simulator Training--RST (Appendix I), and the Perceived



Key:
1. Standard film screen
2. Table with 16 mm projector, filmstrip machine, and tape recorder
3. Observation room separated by special glass (one-way mirror)
4. Microphone hooked-up with observation room
5. Tape recorder in observation room
6. Participant's tables: four participants per table

FIGURE 1

SIMULATOR ROOM

Effects of Simulation Training Questionnaire--PEST (Appendix J), and an interview schedule.

The above instruments were used on the schedule presented in Figures 2 and 3.

X. INSTRUMENTS

Aside from the Perceived Problem Inventory, whose development was described earlier, no new instruments were developed by this project. Existing instruments or adaptations thereof were used to test the hypotheses.

Perceived Problems Inventory--PPI (see Appendix B). The development of this instrument from existing instruments and research and its validation are described earlier. The instrument listed 117 persistent problems of teachers with a four-point scale placed opposite each item so that respondents could indicate to what degree they considered that item to be a problem.

Classroom Observation Record--COR. The Classroom Observation Record from Ryan's Teacher Characteristics Study was adapted to this study by deleting the first four items concerning the behavior of pupils.[4] This was done in the belief that student teachers do not significantly influence the classroom climate nor are classroom teachers objective enough to rate these factors in their own classrooms. The glossary was an integral part of each instrument and teachers

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[4] David J. Ryans, Characteristics of Teachers (Washington, D.C.: American Council on Education, 1960), p. 86.

FALL SEMESTER
1966–1967

FIRST QUARTER **SECOND QUARTER**

(N=38)

N$_e$ =20

R

N$_c$ =18

		FIRST QUARTER			SECOND QUARTER	
DATE	9/9	9/12 9/23	9/26 11/10	11/11	11/14 1/25	1/26
ACTIVITY	REGISTRATION	SIMULATOR STUDENT TEACHING	STUDENT TEACHING	SEMINAR	STUDENT TEACHING	CONVOCATION
EXPERIMENTAL	1. SD$_1$ 2. MTAI$_1$	1. SD$_2$ 2. CS$_1$ 3. RST 4. Interviews	1. COR(ST) 2. STER(ST)$_1$ 3. STER(CS)$_1$ 4. PPI(ST)$_1$ 5. AFR$_1$	1. SD$_3$ 2. MTAI$_2$ 3. CS$_2$ 4. PPI$_1$	1. STER(ST)$_2$ 2. STER(CS)$_2$ 3. PPI(ST)$_2$ 4. AFR$_2$	1. SD$_4$ 2. MTAI$_3$ 3. CS$_3$ 4. PPI$_2$ 5. PEST
CONTROL		1. SD$_2$ 2. CS$_1$	SEE ABOVE		SEE ABOVE	

Note: SUBSCRIPTS

(S) - Student Teacher
(ST) - Supervising Teacher
(CS) - College Supervisor
1 - First Administration

INSTRUMENTS

SD - Semantic Differentials
MTAI - Minnesota Teacher Attitude Inventory
CS - Confidence Scale
PPI - Perceived Problems Inventory
STER - Student Teacher Evaluation Report
RST - Reactions to Simulator Training
COR - Classroom Observation Record
AFR - Assumption of Full-time Responsibility
PEST Perceived Effects of Simulation Training Questionnaire

FIGURE 2. FALL SEMESTER EVALUATION SCHEDULE

SPRING SEMESTER

1966—1967

THIRD QUARTER

FOURTH QUARTER

(N=38)

N_e =20

R

N_c =18

	THIRD QUARTER				FOURTH QUARTER	
DATE	1/23	1/30 2/10	2/14 3/22	4/3	4/4 6/9	6/10
ACTIVITY	REGISTRATION	SIMULATOR STUDENT TEACHING	STUDENT TEACHING	SEMINAR	STUDENT TEACHING	CONVOCATION
EXPERIMENTAL	1. SD_1 2. $MTAI_1$	1. SD_2 2. CS_1 3. RST 4. $MTAI_2$	1. COR(ST) 2. $STER(ST)_1$ 3. $STER(CS)_1$ 4. $PPI(ST)_1$ 5. $AFR(ST)_1$	1. SD_3 2. $MTAI_3$ 3. CS_2 4. PPI_1	1. $STER(ST)_2$ 2. $STER(CS)_2$ 3. $PPI(ST)_2$ 4. $AFR(ST)_2$	1. SD_4 2. $MTAI_4$ 3. CS_3 4. PPI_2 5. PEST
CONTROL		1. SD_2 2. CS_1 3. $MTAI_2$	SEE ABOVE		SEE ABOVE	

Note: **SUBSCRIPTS**

(S) - Student Teacher
(ST) - Supervising Teacher
(CS) - College Supervisor
1 - First Administration

INSTRUMENTS

SD - Semantic Differentials
MTAI - Minnesota Teacher Attitude Inventory
CS - Confidence Scale
PPI - Perceived Problems Inventory
STER - Student Teacher Evaluation Report
RST - Reactions to Simulator Training
PEST Perceived Effects of Simulation Training Questionnaire
COR - Classroom Observation Record
AFR - Assumption of Full-time Responsibility

FIGURE 3. SPRING SEMESTER EVALUATION SCHEDULE

were trained in the use of this instrument. A six-point Likert-like scale was used for each of the remaining eighteen pairs of adjectives with an N available for behaviors that could not be observed. Use of the N was greatly discouraged during the training session.

Student Teacher Evaluation Report--STER (Appendix F). This instrument is used by the State College at Brockport to evaluate the students at the completion of each quarter of student teaching. The supervising teacher is asked to rate the student from 1 to 5 for each of fifteen characteristics or abilities. Such items as voice, planning, questioning and vitality are included. For the purposes of this study only the summary marks (PTI), as awarded by the supervising teacher and the off-campus supervisor, were used as a measure of overall success during student teaching. During the second quarter when some of the students were assigned to the Campus School, only one mark was assigned since there were no off-campus supervisors.

Semantic Differentials--SD (Appendix G). A set of twelve semantic differentials was assembled and placed randomly in an instrument labeled Adjective Scales and prefaced with instructions.[5] The concepts used were: methods of teaching, supervisor's visit, my first year of teaching, supervising teacher, teacher, Pat Taylor, relationship with parents, student teaching, discipline problems, myself as a teacher, pupils, and classroom bookkeeping. Each concept had sixteen adjective scales of 9 points each. One pair of adjectives each was selected because it yielded high on one of the three dimensions of meaning: evaluation, potency, or activity.

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[5] C. E. Osgood, G. J. Suci, and P. H. Tawnenbaum, The Measurement of Meaning (Urbana: University of Illinois Press, 1957).

Minnesota Teacher Attitude Inventory--MTAI. The MTAI was used to measure changes in the student teacher's attitudes toward youth.[6] This 150 item standardized inventory is published by the Psychological Corporation and has been widely used in research on teaching and teachers.[7]

Confidence Scale--CS (Appendix H). In his evaluation of Kersh's simulation, Vlcek developed a confidence scale.[8] Elements of this scale were used in developing a new confidence scale based on the thirty-two persistent problems of beginning teachers. Student teachers were requested to place an X before very confident, confident, uncertain, or very uncertain in order to express their feelings about each of the problems.

Assumed Full Responsibility Card--AFR. The simple report illustrated in Figure 4 was used to determine the number of days each student required before he was able to take the role of the teacher in the classroom.

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[6] W. W. Cook, H. Leeds, and R. Callis, Minnesota Teacher Attitude Inventory (New York: The Psychological Corporation, 1951).

[7] J. W. Getzels, and P. W. Jackson, "The Teacher's Personality and Characteristics," in N. L. Gage (ed.), Handbook of Research Teaching (Chicago: Rand McNally, 1963).

[8] Charles W. Vlcek, "Assessing the Effect and Transfer Value of a Classroom Simulator Technique" (unpublished doctoral dissertation, Michigan State University, 1965).

My student teacher ______________________

assumed full responsibility for the class

(as student teacher) on ______________________
(Date)

____
Signed

FIGURE 4

ASSUMED FULL RESPONSIBILITY CARD

Reactions to Simulator Training--RST (Appendix I). In order to obtain a general reaction from the simulator participants an instrument was developed that contained three sections. The first section asked thirteen questions concerning the student's reaction to his emotional involvement, assessment of the value of the experience, and suggestions concerning various aspects of the simulator. The second part asked the student to write a brief paragraph about how he felt about his simulator experience, and the third a free response section that asked how he felt the simulator might be improved.

Perceived Effects of Simulation Training--PEST (Appendix J) A series of six questions that sought to get the student teacher (or former student teacher) to express his opinions and state his experiences concerning the effects of the simulator on his teaching were compiled to form this questionnaire.

Interview Schedule--At the completion of the first simulator, graduate students from the University of Rochester interviewed the student teachers involved using the following list of questions:

1. Please describe and evaluate the discussion leaders' techniques.

2. Do you believe that the particular discussion leaders had a special effect in this experience or would the experience be basically the same with any discussion leader?

3. Please describe the physical set-up of the room and its effects on your performance. Do you have any suggestions?

4. Please evaluate the amount and type of work required in this experience.

5. How would you evaluate the scheduling and pacing of this experience.

6. Do you believe you were somehow fortunate, unfortunate, or somewhat different because you were selected to participate in this experience?

7. In what ways did the simulator effect you personally?

XI. WORKSHOP TO INCREASE INTER-RATER RELIABILITY

In order to acquaint the participating supervising teachers with the design of the study, to provide them with general instructions and to give them specific training to use the Classroom Observation Record, an all day workshop was held (see Appendix K) both for the fall and spring experiments.

After a general orientation to the project, supervising teachers were given extensive opportunities to observe and to discuss teaching behavior via video tape and to use the COR to assess it. Efforts were made to improve inter-rater reliability by discussing the categories of the COR and the actions of the filmed teachers. At the conclusion of the day a final inter-rater reliability test using the COR was made using a new video taped teaching episode.

Descriptively, it can be reported that the supervising teachers trained as observers were in high agreement when assessing the final teaching episode using the COR. Although it was possible to assess the video taped teacher on a Likert-type scale from 1-7, on most of the eighteen variable continua, the raters were highly clustered within two scale points.

Table III shows the result of the second training session. Thirty-eight supervising teachers were trained, however, four left early and three COR's were discarded as unusable.

XII. THE SIMULATOR

In general the objectives of the simulator experience were: (1) to have each participant assume the role of Pat Taylor, a beginning fifth grade teacher at Longacre School in the Town of Monroe; (2) to provide each participant with professional materials normally available to teachers; (3) to expose participants to critical teaching problems through simulation; (4) to provide participants with opportunities to analyze and solve the problems; and (5) to provide opportunities for

TABLE III

RESULTS OF SUPERVISING TEACHER TRAINING IN USING THE CLASSROOM OBSERVATION RECORD

Variable	Rating Range[a]	Highest Two Scale Point Cluster	Percent Responding in That Cluster
1. partial-fair	4-6	5-6	93.54
2. autocratic-democratic	4-7	6-7	87.09
3. aloof-responsive	5-7	5-6	96.77
4. restricted-understanding	4-7	6-7	67.74
5. harsh-kindly	5-7	5-6	93.54
6. dull-stimulating	5-7	5-6	96.77
7. stereotyped-original	5-7	5-6	96.77
8. apathetic-alert	1-7	5-6	96.77
9. unimpressive-attractive	1-7	5-6	96.77
10. evading-responsible	5-7	6-7	80.64
11. erratic-steady	5-7	5-6	96.77
12. excitable-poised	4-6	5-6	93.54
13. uncertain-confident	5-7	5-6	90.32
14. disorganized-systematic	5-7	5-6	96.77
15. inflexible-adaptable	5-7	6-7	83.87
16. pessimistic-optimistic	5-7	5-6	87.09
17. immature-integrated	4-7	5-6	80.64
18. narrow-broad	4-7	6-7	77.41

[a] (Possible 1-7)

participants to project and to react to each other. This section is concerned with a description of the above activities.

The simulator began on Monday morning[9] with an orientation which gave attention to attendance and hours (alternative daily schedules are in Appendix L), physical setting, and the relationship of the simulator to the student teaching experience. At mid-morning the orientation to Longacre School and Monroe was begun. This included the use of the filmstrips and distribution of the background materials--cumulative records, faculty handbook, etc.

The early afternoon was used to study the teacher materials and to discuss the school and community. The first problem was presented at mid-afternoon.

Throughout the simulator Dr. Donald Cruickshank, Dr. Frank Broadbent, and Mr. Roy Bubb concentrated on the following tasks: (1) keeping the general schedule for the two weeks (Appendix M), (2) providing background material as previously described, (3) introducing critical teaching problems, (4) acting as non-participants in problem discussions, and (5) keeping the discussion moving.

Some elaboration of the directors' tasks is necessary. Only one director worked with the experimental group at one time. The general schedule involved working toward the solution of an average of four problems each day with approximately one and three-quarter hours devoted to each. After the problem was presented, participants were given forty-five minutes to react independently using an Incident Response Sheet (Appendix N).

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[9] Both experimental and control groups were pretesting the preceding Friday. See Figures 2 and 3, pages 34 and 35.

The rationale for problem solving contained on the sheets was suggested in part by work done by Ryans.[10] It included (1) defining the problem; (2) defining the task; (3) retrieving appropriate information (searching background material, selecting, deciding), reintegrating information (summarizing, synthesizing, recombining); (4) considering alternative solutions and predicting their consequences; and (5) selecting one alternative as "best."

Each incident Response Sheet contained six to ten guiding questions selected and/or adopted from a larger and more inclusive potential list (see Appendix N).

Following independent problem analysis using the Incident Response Sheet, participants in groups of four interacted for fifteen minutes to each other's solutions sometimes using role play. In the remaining forty-five minutes allocated for problem analysis, participants reacted to the problem as a group. The group often chose or was directed to engage further in role play at that time.

The same procedure was employed for the analysis of all thirty-one critical problems. However, in several cases (incidents 2, 3, 29, 34, 45, and 75) problems were introduced at the end of the day and assigned for analysis. Such incidents were referred to as "Take Home

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[10] David J. Ryans, "Teacher Behavior Theory and Research: Implications for Teacher Education," The Journal of Teacher Education, September, 1963.

Problems" and were so assigned in order that participants would have additional time and resources for problem solving.

CHAPTER III

RESULTS

This chapter is divided into two sections. The first section presents data derived from testing five projected consequences stated within the general hypothesis. (See page 9.) A second section contains data which reflects the simulation participants' personal reaction to their involvement in the simulator.

I. TEST OF HYPOTHESIS (CONSEQUENCE 1)

The hypothesis stated that, if beginning teachers are given preservice opportunities to encounter identifiable problems of beginning teachers and to develop solutions for them, then (Consequence 1) such problems will be less numerous than if they are not so encountered. To test Consequence 1 both field test groups (Group I--Fall Semester group and Group II--Spring Semester group) reacted twice each in a self-report fashion on the PPI making a problem--no problem response to each of the 117 items.

The first observation was made after S's and C's in Group I had completed their first quarter (one-half semester) of student teaching. (Complete evaluation schedules, Figures 2 and 3, are on pp. 34-35. After the first quarter of student teaching nineteen S's (who had two weeks of simulation training in lieu of the first two weeks of student teaching) reported an average of 48.63 problems each (possible 117). Eighteen C's (no simulation training) reported an average of 50.55 problems per C.

The second observation using the PPI with Group I was made after both quarters of student teaching had been completed. At that time eighteen S's reported an average of 43.05 problems while seventeen C's averaged 46.94 problems. In both PPI self-reports of Group I, S's perceived themselves as having slightly fewer problems than did C's.

The same procedure was employed with Group II (Spring group). After the first quarter, twenty S's reported an average of 35.55 problems while eighteen C's reported an average of 27.62 problems. At the conclusion of the second quarter of student teaching, twenty Group II S's averaged 32.10 problems compared with twenty C's 35.05 average.

In contrast to Group I results, Group II S's reported more problems than C's at the end of one quarter of student teaching. However, by the completion of both quarters, Group II S's had reduced their perceived problems while C's reported conversely that they had more problems.

In summary, in three of four observations S's felt that they had fewer PPI listed problems than did C's. Both C's and S's reduced their perceived problems from the end of the first to the end of the second quarter except for C's in Group II who indicated their problems had increased in number.

A summary of the results of this use of the PPI is displayed in Table IV.

In a second effort to test Consequence 1, a Chi Square item-by-item analysis of the PPI self-reported responses was made at the end of each quarter. At the end of the first quarter of student teaching,

TABLE IV

AVERAGE NUMBER OF PROBLEMS SELF-REPORTED ON PPI BY S's AND C's FOR EACH OF TWO FIELD TESTS

	End of First Quarter	End of Second Quarter
Group I (Fall)	S's = 48.63 C's = 50.55	S's = 43.05 C's = 46.94
Group II (Spring)	S's = 35.55 C's = 27.62	S's = 32.10 C's = 35.05

the control group self-reported the following two problems significantly more times than the simulation group:

#3 Needing help in selecting materials

#77 Feelings of inferiority.

At the end of the second quarter the differences also favored the S group as C's self-reported the following two problems significantly more times:

#2 Lacking enthusiasm for a subject

#88 Parents complaining about homework assignments.

When total $C_1 + C_2$ item by item responses on the PPI are compared to total $S_1 + S_2$ responses, results again favor S's. C's self-reported the following problems significantly more often:

#2 Lacking enthusiasm for a subject

#3 Needing help in selecting materials

#77 Feelings of inferiority

#111 Unable to maintain pupil interest.

However on two items S's self-reported significantly more often as follows:

#15 Maintaining order during field trips

#90 Telling parents that their children have problems.

Results of Chi Square item by item analysis of PPI responses for both Group I and Group II are found in Table V. The same Chi Square item-by-item comparisons were made between C's and S's in Group II. At the end of the first quarter of student teaching Group

TABLE V

SIGNIFICANT CHI SQUARE DETERMINED PERCEIVED PROBLEM INVENTORY ITEMS AS SELF REPORTED BY STUDENT TEACHERS IN TWO FIELD TEST GROUPS

	Group I Fall Field Test			Group II Spring Field Test		
Problem Statements	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters
2. Lacking enthusiasm for a subject		C	C			
3. Needing help in selecting materials	C		C			
9. Managing distributions and collections						S
12. Getting students to do homework						S
15. Maintaining order during field trips			S			
32. Feelings of insecurity						C
36. Finding out what content I am supposed to cover				S		S
41. Organizing an orderly procedure for children					S	
77. Feelings of inferiority	C		C			
78. Organizing procedures for moving a class					S	S
88. Parents complaining about homework assignment		C				
90. Telling parents that their children have problems			S			
93. Having difficulty with written communication				S		
94. Finding out about community resources						S
97. Using collected information in working with individual child				S		
108. Having a distaste for grading papers				S		S
111. Unable to maintain pupil interest			C			
114. Inability to keep up professionally in my field				C		

Note: ("C" means a problem for C's, "S" means a problem for S's.)

II S's self-reported the following problems significantly more times than C's:

#36 Finding out what content I am supposed to cover

#93 Having difficulty with written communication

#97 Using collected information in working with an individual child

#108 Having a distaste for grading papers.

Conversely C's self-reported an "inability to keep up professionally in my field" (114).

Following the second quarter, Group II S's self-reported the following problems significantly more times than C's:

#41 Organizing an orderly procedure for children

#78 Organizing procedures for money as a class

When the data were combined, that is $S_1 + S_2$ responses were compared with $C_1 + C_2$ responses, eight group differences were noted. S^s self-reported the following problems significantly more times:

#9 Managing distributions and collections

#12 Getting students to do homework

#36 Finding out what content I am supposed to cover

#78 Organizing procedures for moving a class

#94 Finding out about community resources

#97 Using collected information in work with the individual child

#108 Having a distaste for grading papers.

C's self-reported "feelings of insecurity" (#32) more often.

Table V presents Group I and Group II self-report data using the PPI.

In summary, Group I self-reports on the PPI favor S's as eight of the ten significant problem differences self-reported by C's. However, Group II data presents an opposite picture in that thirteen of fifteen significant differences on problems were self-reported by S's.

A third test of Consequence 1 was made by asking supervising teachers of all C's and S's to react on the PPI reporting the problems that they felt their student teachers had. The first observation of Group I was made after S's and C's had completed their first quarter of student teaching. At that time nineteen supervising teachers of S's reported their student teachers had an average of 28.47 problems. Eighteen supervising teachers of C's reported an average of 32.28 problems.

The second observation for Group I requested a different group of supervising teachers to respond on the PPI at the end of the second student teaching quarter. At that time eighteen supervising teachers of S's reported an average of 23.89 problems per student while nineteen supervising teachers of C's reported 35.68 problems per student teacher.

During both observations made for Group I, supervising teachers of S's consistently reported their student teachers as having fewer problems on the average. In addition the data reported by supervising teachers of S's indicate S's problems were reduced in number between observations (28.47--23.89), while supervising teachers of C's seem to indicate that their student teachers' problems increased (32.28--35.68).

The same procedure was employed with the second field test or Group II. After the first quarter, twenty supervising teachers of S's reported 34.75 problems while eighteen supervising teachers of C's reported 43.28 problems. At the conclusion of the second student teaching quarter, nineteen supervising teachers of S's reported 27.63 problems compared with eighteen supervisors of C's reporting 31.83 problems.

Again as with Group I, supervising teachers of S's consistently felt their student teachers had fewer problems. A summary of the results of supervising teachers' ratings of S's and C's using the PPI is found in Table VI.

A Chi Square item-by-item analysis of supervising teacher responses on the PPI was made in order to determine whether any significant differences were noted between C^s and S^s on specific problems.

The first observation was made at the end of the first quarter at which time significant differences existed between C's and S's on six items. Supervising teachers of S's reported their student teachers had greater difficulty with:

#12 Getting students to do homework
#19 Finding out about radio and TV programs
#49 Being afraid to teach controversial subjects
#58 Having activities ready for children's rest time
#87 Unable to operate AV equipment
#115 Not being prepared to teach under a new organization.

The second observation made by supervising teachers revealed opposite results. That is, all five significant differences favored S's as teachers of C's reported more often than C's experienced difficulty:

#34 Relating a subject meaning fully to children
#47 Not knowing how to deal with reading problems
#53 Not wanting a certain student in my class

TABLE VI

AVERAGE NUMBER OF PROBLEMS OF STUDENT TEACHERS REPORTED BY SUPERVISING TEACHERS ON THE PPI FOR S's AND C's FOR EACH OF TWO FIELD TESTS

	End of First Quarter	End of Second Quarter
Group I (Fall	S's = 28.47 C's = 32.28	S's = 23.89 C's = 35.68
Group II (Spring)	S's = 34.75 C's = 43.28	S's = 27.63 C's = 31.38

#81 Lacking understanding of my subject(s)
#114 Inability to keep up professionally in my field.

Combined data, C_{1t} + C_{2t} vs. S_{1t} + S_{2t}, indicated that overall, teachers of C^s reported their student teachers had more problems with:

#3 Needing help in selecting materials
#72 Constructing bulletin boards
#81 Lacking understanding of my subject
#101 Not understanding the value of a plan book.

Results of supervising teacher use of PPI for Groups I and II are presented in Table VII. Similar comparisons were made of the Group II subjects using supervising teacher responses on the PPI.

At the end of the first quarter, teachers of C's reported their student teachers had more problems with:

#6 Explaining [the] grading system to children
#10 Involving children in group discussion
#39 Finding ways to integrate isolated children
#42 Not knowing how to deal with reading problems
#51 Difficulty in identifying those who need remedial help
#54 Formulating questions that provoke discussion
#65 Having difficulty preparing lesson plans
#75 Being able to prepare classroom tests that are valid
#86 Teaching in all area for which I am unprepared
#93 Having difficulty with written communication
#99 Being unable to adjust to certain ethnic groups
#106 Having difficulty with oral communication.

Supervising teachers of S's reported (#1) their student teachers had more difficulty "having children follow routines."

At the end of the second quarter, supervising teachers of C's accounted for three differences reporting that their student teachers had more problems with:

#11 Finding films and filmstrips
#14 Collecting anecdotal information
#39 Finding ways to integrate isolated children.

Combined data for Group II $C_1 + C_2$ vs. $S_1 + S_2$ indicated that overall, teachers of C's reported significantly more often that their student teachers had problems:

#6 Explaining the grading system to children
#11 Finding films and filmstrips
#24 Disturbed by school regulations
#39 Finding ways to integrate isolated children
#51 Difficulty identifying those who need remedial help
#54 Formulating questions that provoke discussion
#64 Obtaining materials for making teaching materials
#65 Having difficulty preparing lesson plans
#81 Lacking understanding of my subject(s)
#85 Being impatient with my students
#86 Teaching in an area for which I am unprepared
#93 Having difficulty with written communication
#99 Being unable to adjust to certain ethnic groups
#104 Working with overly dependent children
#106 Having difficulty with oral communication.

Results of Group I and II supervising teacher responses on the PPI are reported in Table VII, pages 57-58.

In summary, both Group I and Group II supervising teacher ratings of their students on the PPI favor S's. Although Group I first quarter differences favored C's, by the end of the second student teaching quarter all differences favored S's. Group II data consistently favored S's as 30 of 31 significant differences on problems were reported by supervising teachers of C's. In only one case did C's and S's differ in favor of C's.

Four efforts were made to test Consequence 1. In the first a determination was made of the average number of problems reported by C's and S's on the PPI. Three of the four observations favored S's as they reported fewer average problems per subject. In addition, average problems reported by S's diminished for both Group I and II from the end of one student teaching quarter to another. Although average problems reported by C's diminished from the end of the first to the end of the second quarter for Group I, Group II C's felt their problems increased. Thus, on three of four observations the null hypothesis of no differences is rejected.

The second test of Consequence 1 was an item-by-item Chi Square of self-reports by C's and S's on the PPI. Although Group I results favor S's, Group II data favors C's. No consistent relationship seems to exist and the null hypothesis is accepted.

A third test of Consequence 1 was made. This comparison was made of the average number of problems C's and S's had as reported by

TABLE VII

SIGNIFICANT CHI SQUARE DETERMINED PERCEIVED PROBLEM INVENTORY ITEMS AS REPORTED BY SUPERVISING TEACHERS OF C's AND S's IN TWO FIELD TEST GROUPS*

	Group I Fall Field Test			Group II Spring Field Test		
	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters
3. Needing help in selecting materials			C			
6. Explaining the grading system to children				C		
10. Involving children in group discussion				C		
11. Finding films and filmstrips						
12. Getting students to do homework	S					
14. Correcting anecdotal information					C	
19. Finding out about radio and TV programs	S					
24. Disturbed by school regulations						C
34. Relating a subject meaningfully to children		C				
39. Finding ways to integrate isolated children				C	C	C
42. Not knowing how to deal with reading problems		C	C		C	
49. Being afraid to teach controversial subjects	S					
51. Difficulty in identifying those who need remedial help				C		C
53. Not wanting a certain student in my class		C				
54. Formulating questions that provoke discussion				C		C
58. Having activities ready for children's rest time	S					
64. Obtaining materials for making teaching materials						C

TABLE VII (continued)

	Group I Fall Field Test			Group II Spring Field Test		
Problem Statements	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters	End of first quarter of student teaching	End of second quarter of student teaching	Combined quarters
65. Having difficulty preparing lesson plans					C	C
72. Constructing bulletin boards			C			
75. Being able to prepare classroom tests that are valid				C		
81. Lacking understanding of my subject		C	C			
85. Being impatient with my students						C
86. Teaching in an area for which I am unprepared				C		C
87. Unable to operate AV equipment	S					
93. Having difficulty with written communication				C		C
99. Being unable to adjust to certain ethnic groups				C		C
101. Not understanding the value of a plan book			C			
104. Working with overly dependent children						C
106. Having difficulty with oral communication				C		C
114. Inability to keep up professionally in my field		C				
115. Not being prepared to teach under a new organization	S					

*Note: "C" means a problem for C's, "S" means a problem for S's.

their supervising teachers. All four observations were consistent. Supervising teachers of S's reported their student teachers averaged fewer problems. In addition, and consistent with results of the first test of Consequence 1, average problems reported diminished for S's from the end of the first student teaching quarter to the end of the second. On the other hand, supervising teachers of Group I C's reported the problems of their student teachers increased in number. The third test of Consequence 1 rejects the null hypothesis.

The fourth and final test of Consequence 1 was an item-by-item analysis of supervising teacher responses on the PPI in order to determine whether any significant differences existed between C's and S's on specific problems. Results of the test indicated that, in five of the six observations made, S's were reported to have fewer significantly different items than C's. In addition, of the thirty-two significant item differences between C's and S's, twenty-five favored S's while seven favored C's. Results reject the null hypothesis of no difference.

In summary, three of the four tests of Consequence 1 reject the null hypothesis of no differences between C's and S's. The results of these tests indicate that student teachers who receive exposure to simulation will perceive themselves and will be perceived by their supervising teachers as having fewer problems than student teachers who are not exposed.

II. TEST OF HYPOTHESIS (CONSEQUENCE 2)

A second consequence stated that "the participants' general teaching performance will be improved." Consequence 2 was tested in two ways. First, performance of C's and S's was judged during the first student teaching quarter by supervising teachers who had undergone training to use the Classroom Observation Record (see pages 39-40). Supervising teachers' ratings are reported in Table VIII.

For Group I Mann Whitney U scores indicated there were no significant differences between S's who had two weeks of simulation plus seven weeks student teaching as compared with C's who had nine weeks all in student teaching.

For Group II C's and S's were different on four of the eighteen classroom observation record scales. In each case where differences existed they favored S's as being more _fair_, _democratic_, _adaptable_, and _integrated_. Group II S's failed to reach an overall .05 level of confidence by a very small margin (.5) since U at this level is 112.

Since only four of the thirty-six possible differences on the scales were significant and neither of the total scale observations were significant, the _null hypothesis of no difference is accepted_ and Consequence 2 lacks adequate support.

Consequence 2 was tested in a second way by comparing the "Potential Teaching Index" (a measure of how much potential student teachers seem to possess) assigned to C's and S's by supervising teachers and college supervisors. Comparisons were made at the end of each student teaching quarter for both Group I and Group II. Mean and

TABLE VIII

MEANS, STANDARD DEVIATIONS, AND U SCORES BY ITEN FOR CLASSROOM OBSERVATION RECORD

	Group I (Fall)					Group II (Spring)				
	Control (N=18)		Simulation (N=19)		U	Control (N=18)		Simulation (N=20)		U
	M		M			M		M		
1. Partial - Fair	5.44	0.92	5.42	0.61	150.50	4.83	0.86	5.45	0.69	107.00*
2. Autocratic - Democratic	5.00	1.08	4.84	1.07	150.50	4.06	1.35	5.35	0.59	62.00*
3. Aloof - Responsive	5.17	0.99	5.00	0.82	145.50	4.72	1.27	5.35	0.67	134.00
4. Restricted - Understanding	5.17	1.10	4.79	1.08	132.50	4.89	0.83	5.10	0.64	157.00
5. Harsh - Kindly	5.39	1.04	5.00	0.88	118.00	4.83	0.99	5.25	0.55	143.00
6. Dull - Stimulating	4.72	0.96	4.16	1.21	124.50	4.11	1.13	4.40	0.94	150.50
7. Stereotyped - Original	4.44	0.78	4.16	1.17	140.50	4.11	0.96	4.55	0.94	140.50
8. Apathetic - Alert	4.83	0.86	5.00	0.88	151.50	4.56	1.04	5.00	0.86	137.50
9. Unimpressive - Attractive	5.44	0.70	5.58	0.61	155.00	5.06	0.87	5.40	0.50	144.00
10. Evading - Responsible	5.17	0.99	4.84	1.07	135.50	4.78	1.00	5.10	0.85	149.00
11. Erratic - Steady	5.22	1.06	5.42	0.90	151.00	4.89	1.02	5.35	0.75	135.00
12. Excitable - Poised	4.83	0.99	5.21	0.92	131.00	4.89	0.90	5.05	0.83	164.00
13. Uncertain - Confident	4.89	0.96	5.00	1.00	157.50	4.44	1.20	4.90	0.79	142.50
14. Disorganized - Systematic	5.11	0.76	5.00	0.94	164.50	4.67	1.19	4.85	0.81	171.00
15. Inflexible - Adaptable	5.00	1.03	5.00	0.67	158.00	4.22	0.81	4.95	0.60	89.00*
16. Pessimistic - Optimistic	5.00	0.97	5.47	0.77	118.00	4.78	1.06	5.35	0.67	126.00
17. Immature - Integrated	5.33	1.03	5.11	1.05	144.00	4.72	1.02	5.40	0.68	111.00*
18. Narrow - Broad	4.72	0.89	4.74	1.05	160.50	4.12	1.15	4.65	0.93	147.00
Total Classroom Observation Record	89.74	11.32	90.89	13.39	153.00	83.00	--	90.45	--	112.50

Note: All figures are rounded for convenience in tabulating.

*U scores significant beyond the .05 level.

mean differences are reported in Table IX. None of the mean differences between C's and S's was significant beyond the .05 level when tested with a t-test. Neither supervising teachers nor college supervisors of C's and S's differed in the potential assigned the student teachers. The null hypothesis is accepted and no support is given to Consequence 2 by its second test. Thus both tests of Consequence 2 accept the null hypothesis. In other words there is no support that shortening student teaching to accommodate simulation training will improve general teaching performance.

III. TEST OF HYPOTHESIS (CONSEQUENCE 3)

The third consequence stated that simulation training would "develop more positive feelings toward persons and concepts related to such [teaching] problems."

Consequence 3 also was tested in two ways. The first test was concerned with measuring C's and S's reactions to twelve concepts using an adjective scale (semantic differential) with bi-polar scales for each concept.

All subjects took the adjective scale four times--prior to student teaching, after the first two weeks of student teaching (after the simulator), after the first quarter, and upon completion of student teaching. Results of these testings are reported below in Table X only for those items which achieved significance since reporting changes on all 192 items would be too bulky.

Thirteen scales from a total of ten of the twelve concepts were

TABLE IX

MEAN POTENTIAL TEACHING INDICES AS REPORTED IN THE STUDENT TEACHER EVALUATION REPORT (STER)

	Group I									Group II											
	First Quarter			Second Quarter			Total			First Quarter			Second Quarter			Total			Total		
	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M
	Reported by Supervising Teachers																				
Control	(18)	4.50		(17)	3.88		(35)	4.20		(18)	3.94		(17)	4.24		(35)	4.09		(70)	4.14	
			-.03			.44			.19			.36			.01			.19			.19
Simulation	(19)	4.47		(19)	4.32		(38)	4.39		(20)	4.30		(20)	4.25		(40)	4.28		(78)	4.33	
	Reported by College Supervisors																				
Control	(18)	3.83		(17)	3.76		(35)	3.80		(18)	3.77		(18)	3.67		(36)	3.72		(71)	3.76	
			-.36			-.13			-.25			.03			.28			.16			-.04
Simulation	(19)	3.47		(19)	3.63		(38)	3.55		(20)	3.80		(20)	3.95		(40)	3.88		(78)	3.72	

Note: H_0: $M_C = M_S$; No D_M significant beyond the .05 level when tested with a "t" test.

TABLE X

SIGNIFICANT VALUES OF CHI SQUARE BETWEEN ADMINISTRATIONS AND GROUPS ON THE ADJECTIVE SCALE (SEMANTIC DIFFERENTIAL)

Concept and Scale (From total 192 items)	Administrations								Groups			
	C1 C2	C2 C3	C3 C4	C1 C4	S1 S2	S2 S3	S3 S4	S1 S4	C1 S1	C2 S2	C3 S3	C4 S4
Pupils (clear-vague)				C4								
Pupils (dirty-clean)								S1	S1			
My first year of teaching (interesting-dull)				C1								
My first year of teaching (clear-vague)	C2			C4								
My first year of teaching (formal-informal)	C2									C2		
My first year of teaching (good-bad)				C4								
Student teaching (chaotic-ordered)									C1			
Discipline problems (poised-excitable)										S2		
Discipline problems (heavy-light)				C4								C4
Relationship with parents (simple-complex)						S3						S4
Relationship with parents (formal-informal)										C2		
Relationship with parents (heavy-light)												C4
Supervisor's visit (interesting-dull)												C4
Supervisor's visit (formal-informal)						S2	S3	S1				
Methods of teaching (formal-informal)										C2		
Supervising teacher (formal-informal)	C1											
Classroom bookkeeping (good-bad)									C1			
Classroom bookkeeping (confident-uncertain)	C2											
Pat Taylor (chaotic-ordered)											C3	
Myself as a teacher (formal-informal)											C3	

Note: The group that scored significantly toward the left side of the scale is listed. Group II is underlined.

significantly different between administrations or between the experimental and control groups for Group I. The two groups started off with significant differences in that these C's felt that student teaching was more "chaotic" and bookkeeping was more "good." During the semester C's changed significantly toward feeling that pupils were more "clear," their first year of teaching was more "clear," and that discipline problems were "heavy." The S's made no significant changes and when compared with the control group at the end of student teaching felt that their relationship with parents was "simple," while the C's felt that their relationship with parents were more "heavy" and the supervisor's visits more "interesting." Three changes occurred in the attitudes of the C's after the first two weeks, whereas no changes were reported by the S's until the change toward seeing supervisor's visits as more "formal" after the first student teaching assignment. Only eleven scales from a total of eight concepts were significantly different between testings or between groups for Group II.

The S's started feeling that pupils were more "dirty" than did the C's. During the semester the S's felt that students became "clean" and supervisor's visits became more "informal." During the semester the C's felt that their first year of teaching became more "dull" and more "good." At the completion of the second semester, only one difference existed between the groups. The C's saw discipline problems as "heavy." Only one significant change occurred after the first two weeks and it again occurred to the C's where this group saw their first year of teaching as more "formal." Three changes occurred between the groups at this time. The S's saw discipline problems as more "poised," relationship with parents as more "informal." Upon completion of the first student teaching assignment the S's thought that relationship with parents were more "simple" than they did after the simulator and compared with the C's saw Pat Taylor as less "chaotic."

Although it appears that those changes and differences that were significant generally favored the simulation group, there were not a sufficient number of changes to reject the null hypothesis for either Group I or II.

The second test of Consequence 3 tested the changes in the two groups' attitudes toward youth during student teaching. Group I subjects were asked to take the Minnesota Teacher Attitude Inventory prior to student teaching and after their first and second experiences. Group II subjects took the MTAI at these times and after the second week, which was upon completion of the simulator for the experimental group. The results of these testings are summarized below in Table XI.

None of the differences in the means of the S's and C's are significant beyond the .05 level when subjected to a t-test. Differences over time within groups were also checked for significance by t-tests. No changes were found to be significant beyond the .05 level of confidence. The null hypothesis is accepted and no support

TABLE XI

MEAN SCORES, STANDARD DEVIATIONS, AND DIFFERENCES BETWEEN THE MEANS ON THE MINNESOTA TEACHER ATTITUDE INVENTORY

	Pre-First Quarter				Post Simulation				Post·First Quarter				Post 2nd Quarter			
	(N)	M		D_M	(N)	M		D_M	(N)	M		D_M	(N)	M		D_M
FIRST SEMESTER																
Control	(18)	43.11	32.07		- - - - - - - -				(18)	38.50	24.67		(17)	22.65	42.07	
				-4.69								-1.28				11.85
Simulation	(19)	38.42	28.89		- - - - - - - -				(18)	27.22	33.71		(18)	34.50	32.76	
SECOND SEMESTER																
	Pre-Third Quarter				Post Simulation				Post Third Quarter				Post 4th Quarter			
Control	(18)	28.39	23.40		(18)	28.17	23.60		(18)	20.39	34.96		(18)	17.44	31.53	
				-3.54				10.53				12.31				5.61
Simulation	(19)	24.85	27.07		(19)	38.70	24.09		(19)	32.70	27.65		(19)	23.15	37.61	

Note: No D_M significant beyond the .05 level when tested with a "t" test.

is given to part two of Consequence 3 that attitudes of the simulation group would be more positive.

Since the null hypotheses for Parts 1 and 2 were not rejected, Consequence 3 concerning the development of more positive attitudes received no support.

IV. TEST OF HYPOTHESIS (CONSEQUENCE 4)

The fourth consequence stated that the simulation group should be more confident as measured on the Confidence Scale. The students completed the Confidence Scale after two weeks (at the completion of the simulator), and at the completion of each assignment of student teaching. Data received from the students are reported in Table XII for Group I and Table XIII for Group II.

There were nineteen significant differences for Group I. After their first quarter of student teaching C's became more confident about the following:

Being at ease when supervised

Judging progress in terms of their own aims

Involving many children in group discussions

They made no gains in confidence during the first quarter and when their confidence at the end of student teaching is compared to their confidence after two weeks of student teaching, significant gains were made only in having a more positive attitude toward grading papers. Six significant changes occurred for the first quarter S's. They became more confident about the following problems:

TABLE XII

NUMBERS OF GROUP I STUDENTS REPORTING CONFIDENCE ON THE CONFIDENCE SCALE AND THE SIGNIFICANCE OF CHI SQUARE BETWEEN GROUPS AND ADMINISTRATIONS

	Groups and Administrations															
	C1	C2	C2	C3	C1	C3	S1	S2	S2	S3	S1	S3	C1	S1	C2	S2	C3	S3
I am confident that I can: N =	18	18	18	17	18	17	18	20	19	18	19	18	18	19	18	19	17	18
1. Reach parents I wish to contact.	12	14	14	14	12	14	11	15	14	14	12	14	13	12	14	14	14	14
2. Introduce a new topic and obtain high interest.	16	17	17	15	16	15	14	19	19	16	14	16	16	14	17	19	15	16
3. Help students with destructive home situations.	5	6	6	8	5	8	5	8	8	8	5	8	5	5	6	8	7	8
4. Handle children's aggressive behavior.	16	13	13	14	16	14	12	18	17	18	13	18	16	13	13	17	14	18
5. Be enthusiastic about each subject.	15	12	12	12	15	12	12	17	17	14	12	14	15	12	12	17	12	14
6. Feel comfortable about giving failing grades.	7	6	6	8	7	8	9	13	12	13	10	13	7	10	6	12	8	13
7. Help students see consequences of undesirable behavior.	15	17	17	16	15	16	16	17	16	16	17	16	15	17	17	16	16	16
8. Cope with students who are not willing to work.	13	15	15	12	13	12	11	16	15	11	12	11	12	12	15	15	12	11
9. Interpret children's capabilities to parents.	11	15	15	10	11	10	15	18	18	15	15	15	11	15	15	18	10	15
10. Discuss children's achievement with parents.	10	15	15	12	10	12	15	19	18	16	16	16	10	16	15	18	12	16
11. Differentiate instruction among children in class.	16	15	15	15	16	15	11	16	15	16	12	16	16	12	15	15	15	16
12. Help children with reading problems.	9	14	14	14	9	14	12	15	14	15	13	15	9	13	14	14	14	15
13. Be happy with routine classroom bookkeeping.	13	13	13	10	13	10	8	12	12	13	7	13	13	7	13	12	10	13
14. Involve pupils in self-evaluation.	12	12	12	15	12	15	10	19	18	16	11	16	12	11	12	18	15	16
15. Integrate the isolated, disliked child.	12	15	15	11	12	11	11	15	14	14	12	14	12	12	15	14	11	14
16. Have a positive attitude toward grading papers.	18	15	15	13	18	13	17	20	19	17	18	17	18	18	15	19	13	17

TABLE XII (continued)

	Groups and Administrations																	
	C1	C2	C2	C3	C1	C3	S1	S2	S2	S3	S1	S3	C1	S1	C2	S2	C3	S3
I am confident that I can: N =	18	18	18	17	18	17	18	20	19	18	19	18	18	19	18	19	17	18
17. Evaluate my objectives.	16	17	17	16	16	16	17	19	18	17	18	17	15	18	17	18	16	17
18. Have children do independent work quietly.	14	16	16	15	14	15	16	17	17	17	16	17	14	16	16	17	15	17
19. Have work for some children while I work with others.	15	17	17	16	15	16	18	19	18	17	19	17	15	19	17	18	16	17
20. Be at ease when supervised.	9	16	16	14	9	14	5	16	16	11	5	11	9	5	16	16	14	11
21. Be patient with my students.	17	17	17	15	17	15	13	20	19	16	14	16	17	14	17	19	15	16
22. Judge progress in terms of my aims.	12	18	18	14	12	14	12	20	19	18	13	18	12	13	18	19	14	18
23. Cope with the constantly disrupting child.	9	13	13	12	9	12	12	13	13	12	12	12	9	12	13	13	12	12
24. Know what to do with students who finish early.	17	17	17	15	17	15	17	18	17	17	18	17	17	18	17	17	15	17
25. Involve many children in group discussions.	13	18	18	16	13	16	13	20	19	15	14	15	13	14	18	19	16	15
26. Find reading materials for readers below grade level.	16	15	15	16	16	16	16	18	17	18	17	14	16	17	15	17	16	14
27. Prepare classroom tests that are valid.	9	12	12	13	9	13	12	16	15	16	13	16	9	13	12	15	13	16
28. Relate subjects meaningfully to children.	15	18	18	16	15	16	13	18	18	16	13	16	15	13	18	18	16	16
29. Relate to parents that their children have problems.	7	11	11	8	7	8	11	18	17	15	11	15	7	11	11	17	8	15
30. Select instructional materials.	15	15	15	16	15	16	15	20	19	18	16	18	15	16	15	19	16	18
31. Interest parents in their children's behavior.	5	10	10	9	5	9	10	14	14	12	10	12	5	10	10	14	9	12
32. Get students to do homework.	10	10	10	11	10	11	9	15	15	15	9	15	10	9	10	15	11	15

TABLE XIII

NUMBERS OF GROUP II STUDENTS REPORTING CONFIDENCE ON THE CONFIDENCE SCALE AND THE SIGNIFICANCE OF CHI SQUARE BETWEEN GROUPS AND ADMINISTRATIONS

	Groups and Administrations															
I am confident that I can: N =	C1 18	C2 18	C2 18	C3 18	C1 18	C3 18	S1 20	S2 20	S2 20	S3 20	S1 20	S3 20	C1 18	S1 20	C2 18	S2 20	C3 18	S3 20
1. Reach parents I wish to contact.	15	16	16	15	15	15	17	15	15	16	17	16	15	17	16	15	15	16
2. Introduce a new topic and obtain high interest.	17	16	16	16	17	16	16	14	14	16	16	16	17	16	16	14	16	16
3. Help students with destructive home situations.	7	8	8	8	7	8	10	7	7	8	10	8	7	10	8	7	8	8
4. Handle children's aggressive behavior.	15	14	14	13	15	13	14	14	14	13	14	13	15	14	14	14	13	13
5. Be enthusiastic about each subject.	12	15	15	13	12	13	11	12	12	14	11	14	12	11	15	12	13	14
6. Feel comfortable about giving failing grades.	7	11	11	13	7	13	10	10	10	13	10	13	7	10	11	10	13	13
7. Help students see consequences of bad behavior.	17	17	17	17	17	17	17	16	16	16	17	16	17	17	17	16	17	16
8. Cope with students who are not willing to work.	14	14	14	13	14	13	11	14	14	11	11	11	14	11	14	14	13	11
9. Interpret children's capabilities to parents.	12	12	12	11	12	11	15	15	15	16	15	16	12	15	12	15	11	16
10. Discuss children's achievement with parents.	13	12	12	13	13	13	18	13	13	18	18	18	13	18	12	13	13	18
11. Differentiate instruction among children in class.	15	12	12	17	15	17	16	15	15	18	16	18	15	16	12	15	17	18
12. Help children with reading problems.	12	11	11	15	12	15	11	15	15	16	11	16	12	11	11	15	15	16
13. Be happy with routine classroom bookkeeping.	15	15	15	14	15	14	8	13	13	16	8	16	15	8	15	13	14	16
14. Involve pupils in self-evaluation.	15	16	16	14	15	14	17	13	13	16	17	16	15	17	16	13	14	16
15. Integrate the isolated, disliked child.	15	12	12	14	15	14	9	12	12	16	9	16	15	9	12	12	14	16
16. Have a positive attitude toward grading papers	18	18	18	17	18	17	18	17	17	17	18	17	18	18	18	17	17	17

TABLE XIII (Continued)

	Groups and Administrations															
	C1	C2	C2	C3	C1	C3	S1	S2	S2	S3	S1	S3	C1	S1	C2	S2	C3	S3
I am confident that I can: N =	18	18	18	18	18	18	20	20	20	20	20	20	18	20	18	20	18	20
17. Evaluate my objectives.	16	17	17	17	16	17	17	17	17	19	17	19	16	17	17	17	17	19
18. Have children do independent work quietly.	15	17	17	15	15	15	14	15	15	19	14	19	15	14	17	15	15	19
19. Have work for some children while I work with others.	18	17	17	17	18	17	19	17	17	20	19	20	18	19	17	17	17	20
20. Be at ease when supervised.	8	11	11	11	8	11	5	11	11	12	5	12	8	5	11	11	11	12
21. Be patient with my students.	17	17	17	16	17	16	19	19	19	18	19	18	17	19	17	19	16	18
22. Judge progress in terms of my aims.	14	16	16	17	14	17	13	7	17	16	13	16	14	13	16	17	17	16
23. Cope with the constantly disrupting child.	13	13	13	16	13	16	10	12	12	15	10	15	13	10	13	12	16	15
24. Know what to do with students who finish early.	17	14	14	17	17	17	19	18	18	19	19	19	17	19	14	18	17	19
25. Involve many children in group discussions.	18	18	18	16	18	16	14	17	17	19	13	19	18	14	18	17	16	19
26. Find reading materials for readers below grade level.	12	16	16	16	12	16	16	18	18	18	16	18	12	16	16	18	16	18
27. Prepare classroom tests that are valid.	13	14	14	17	13	17	13	14	14	19	13	19	13	13	14	14	17	19
28. Relate subjects meaningfully to children.	16	16	16	17	16	17	15	15	15	18	15	18	16	15	16	15	17	18
29. Relate to parents that their children have problems.	10	13	13	11	10	11	13	14	14	13	13	13	10	13	13	14	11	13
30. Select instructional materials.	15	17	17	17	15	17	17	17	17	18	17	18	15	17	17	17	17	18
31. Interest parents in their children's behavior.	7	6	6	12	7	12	4	11	11	12	4	12	7	4	6	11	12	12
32. Get students to do homework.	14	12	12	16	13	16	13	14	14	14	13	14	14	13	12	14	16	14

Involving pupils in self-evaluation

Being at ease when supervised

Being patient with their students

Judging progress in terms of their own aims

Coping with the constantly disrupting child

Involving many children in group discussions

Relating children's problems to their parents

The S's also made no gains during the second quarter. The comparison of their confidence at the end of student teaching with their confidence at the completion of the simulator results in six significant changes. The S's gained confidence in:

Handling children's aggressive behavior

Being happy with routine classroom bookkeeping

Involving student's in self-evaluation

Being at ease when supervised

Coping with the constantly disrupting child

Getting students to do homework

Comparing Group I S's and C's result in three significant differences. The C's start out being more confident about being happy with routine classroom bookkeeping. At the end of the first quarter, the S's feel greater confidence in involving pupils in self-evaluation. At the end of student teaching the S's express more confidence, but this is significant only about being able to relate children's problems to their parents.

There were only thirteen significant differences for Group II. No increase in confidence resulted from the first quarter of student teaching in the C's and the second quarter increased their confidence in differentiating instruction among children in the class. Since this gain was made because of a loss of confidence in this area during the first quarter, it was not large enough to be significant for the full semester. The only gain in confidence for the full year was in feeling comfortable about giving failing grades. The C's made one significant gain in each quarter--confidence in being able to interest parents in their children's behavior and in preparing classroom tests that are valid. During the semester they retained these two gains and added four more. They became more confident about:

Involving pupils in self-evaluation
Integrating the isolated, disliked child
Having children do independent work quietly
Being at ease when supervised
Involving many children in group discussions

Comparing Group II S's and C's results in only one significant difference, and this difference was that at the completion of the simulator the C's were less confident about involving many children in group discussions. At the end of student teaching, the S's were slightly more confident than the C's but no difference in items is statistically significant.

The most important comparison is between the simulation and control groups at the completion of student teaching. There is not sufficient statistical evidence to reject the null hypothesis.

Therefore Consequence 4 concerning greater confidence is not supported.

V. TEST OF HYPOTHESIS (CONSEQUENCE 5)

Consequence 5 states that the simulation group should be ready to assume full-time responsibility for student teaching sooner.

The sponsor teachers were asked to report the dates that their student teachers assumed, or could have assumed, full-time responsibility (as a student teacher) in the classroom. The days were numbered from the first day of the assignment. For members of the simulation groups, this meant that their first assignment was numbered day eleven since they spent the first ten days in the simulator. In a few cases a student never assumed full responsibility and therefore was assigned the full number of days he was in the assignment.

Data received from the teachers are tabulated and summarized in Table XIV.

There is no significant difference between C's and S's for the year and only one difference, significant at the .05 level, of 6.1 days for Group II in the first quarter which favors C's. Therefore, the null hypothesis is accepted and no difference was found between the groups. Simulation experience did not effectively shorten the time students needed to assume full responsibility in full-time, full-semester student teaching. Consequence 5 is not supported.

TABLE XIV

MEAN DAYS TO ASSUMING FULL RESPONSIBILITY

	Group I First Semester									Group II Second Semester									Year		
	1st Quarter			2nd Quarter			Total			3rd Quarter			4th Quarter			Total					
	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M	(N)	M	D_M
Control																					
	(18)	24.4		(17)	29.4		(35)	26.8		(18)	24.0		(18)	24.4		(36)	24.1		(71)	25.5	
Simulator			3.1			-.7			1.3			6.1*			-2.2			2.2			1.7
	(19)	27.5		(18)	28.7		(37)	28.1		(20)	30.1		(19)	22.2		(39)	26.3		(39)	27.2	

Note: *$t = 2.14$, $P \angle .05$

VI. REACTIONS TO SIMULATOR TRAINING

During the post-test session at the conclusion of simulator I and II, members of the experimental group were asked to respond to simulator training using an instrument called "Reactions to Simulator Training" (see Appendix I).

The response of the students to the question in Part I, as summarized in Table XV indicates that the participants felt that simulation training was very enjoyable, realistic, very helpful, much more meaningful than lectures, and was as valuable as is the first two weeks of student teaching. In addition, the group's responses indicate that they felt involved in the contrived situations, that the discussions were very valuable in developing their own concepts of teaching, that the simulation experiences were very helpful in aiding them to develop methods of coping with classroom problems, and finally that they would recommend simulation training to their friends.

When asked about how large the training group should be, participants indicated that a group of six was too small and a group of forty too large. They did not agree that the materials could be used on a one-to-one basis. Response from both groups of participants appears to be very similar. The two areas where the groups differ slightly were in appreciation of the experience (numbers 1 and 12) and in the belief that the size of the group could be varied (numbers 9-11). It appears that the experience was pleasanter for the second group and this may account for the groups' different responses on

TABLE XV

RESULTS OF REACTIONS TO SIMULATOR TRAINING - PART I

Question	Simulator I		Simulator II	
	Average*	Range	Average*	Range
1. I enjoyed receiving training in the classroom simulator.	3.7	a-b	3.9	a-b
2. The classroom simulator was realistic "life-like."	2.7	a-d	3.0	a-c
3. I felt as though I was involved in the situation.	3.2	a-c	3.5	a-b
4. The discussions were valuable in developing own concepts.	3.6	a-b	3.4	a-c
5. I believe that the simulator experience was meaningful in its relation to real classroom problems.	3.5	a-c	3.5	a-c
6. I feel that my experience in the classroom simulator will help me to identify classroom problems.	3.6	a-c	3.7	a-c
7. I believe that my experience in the classroom simulator has helped me develop methods of coping with classroom problems.	3.6	a-c	3.4	a-b
8. The classroom simulator made the material more meaningful than if it had been presented in lectures.	3.7	a-c	3.9	a-b
9. I believe that the classroom simulator experience should be provided on an individual basis.	1.4	b-d	1.8	a-d
10. I believe that the classroom simulator experience should be provided to smaller groups (up to six students).	2.0	a-d	2.1	a-d
11. I believe the classroom simulator experience could be provided to an entire class (40-60 students) just as effectively.	1.6	b-d	1.9	a-d
12. I would recommend classroom simulator experiences to my friends.	3.0	a-c	3.6	a-b
13. I believe the classroom simulator experience was as valuable as the first two weeks of student teaching.	3.5	a-c	3.5	a-d

*Assume: a=4, b=3, c=2, d=1.

these items. When asked the open-ended question, "How do you feel about your simulator experience?" the reactions were varied. As presented in Table XVI, predominant positive comments were: it was enjoyable, worthwhile, exciting; it helped to develop insights into teaching problems; it changed my ideas about handling teaching problems; it helped me gain more self-confidence about teaching, and it made me more aware that problems would be faced in teaching. Only one general negative remark was made indicating physical, mental and emotional exhaustion from involvement. (This might be considered a positive comment when viewed as participant input.) This problem of exhaustion was compounded for the first simulator because of the poor physical conditions and longer hours. Changes in the schedule and physical environment made for the second simulator apparently reduced many of the negative effects and may have allowed some students to become more involved.

Table XVII contains the tabulated response to Part III. When asked how the simulator might be improved, fourteen participants of the first simulator desired a shorter day. (This simulator began at 8:00 a.m. and ended either at 4:30 or 5:00 p.m. with "take-home problems" necessitating some evening work.) Their other suggestions were to improve physical facilities as seating and ventilation, and to permit a more flexible rather than structured time schedule for working with the critical teaching problems. (All problems were allotted the same amount of time.)

TABLE XVI

RESULTS OF REACTIONS TO SIMULATOR TRAINING - PART II

	Simulator	
Subjects' feelings about his simulator experiences:	I	II
Positive		
1. Felt that simulator experience was enjoyable, exciting, or worthwhile.	12	11
2. Developed insight into problems that elementary teachers face.	9	3
3. Changed personal problem-solving ideas through simulator discussions.	8	5
4. Gained self-confidence about teaching.	5	6
5. Became more aware that problems would be faced in teaching.	4	7
6. Developed a broader outlook of teaching.	3	0
7. Changed from original negative attitude toward simulation experience to a positive one.	3	1
8. Simulation should benefit or be a valuable experience for every beginning teacher.	3	5
9. Felt deeply involved.	3	0
10. Became more professional.	2	0
11. Felt problems realistic.	1	0
12. Could definitely apply knowledge in classroom.	1	1
Negative		
1. Frustrated and/or physically, mentally, and/or emotionally exhausted by experience.	10	1
2. Questioned whether problem solving technique would be recalled when actual situation was met.	3	0
3. Requested shorter days, more ventilation.	3	0
4. Discussed some problems too long, some not enough.	2	1
5. Concentrated too much on negative or unimportant problems.	2	0
6. Needed more information.	2	0
7. Needed better control leader.	1	1
8. Too much work involved on response sheet.	2	0
9. Injected too much personal experience (students).	1	0
10. Not motivated sufficiently or not involved.	2	0
11. Needed better method of trainee selection to have more representative age in class.	1	0

TABLE XVII

RESULTS OF REACTIONS TO SIMULATOR TRAINING - PART III

Subjects' suggestions on how the simulator might be improved:		Simulator I	Simulator II
1.	Shorten course day.	14	5
	(Extend length of course)	(4)	(2)
	(More breaks, longer lunch hour)	(2)	(0)
2.	Provide leadership who will involve all members of the group.	3	0
3.	Provide better physical environment.	7	0
	(Chairs, ventilation, coffee)		
4.	Improve technical quality of films.	8	0
5.	Permit flexible time periods for different questions.	7	0
6.	Provide relief from exhaustion and tension.	7	0
7.	Modify or eliminate take home problems.	7	0
8.	Provide better information and identification about children, particularly on screen.	5	0
9.	Provide more information about Pat Taylor and staff.	4	0
10.	Vary types of problems presented in one day.	4	0
11.	Provide better and more democratic group leadership.	4	0
12.	Reduce the number of problems.	4	1
13.	Hold group more to discussion of topics.	2	0
14.	Cover problems more thoroughly.	2	2
15.	Prepare students for strain and emotional involvement.	2	0
16.	Provide more problems with children. less with parents.	2	0
17.	Have real-life actors.	1	0

Fewer suggestions were made by the participants of the second simulator. These suggestions concerned shortening the day, covering the problems more thoroughly, and reducing the number of problems. Again, it would appear that the changes that were made in the schedule and the physical environment reduced many of the negative responses to the experience.

Results of Post Simulator I Interviews

During a subsequent individual interview conducted by persons unknown to the participants, the following questions and comments were presented: (1) Describe and evaluate the discussion leaders' techniques, (2) Do you believe that the particular discussion leaders had a special effect on this experience or would the experience be basically the same with any leader? (3) Describe the physical set-up, etc., (4) Evaluate the amount and type of work required, (5) How would you evaluate the scheduling and pacing of the simulator? (6) Do you believe you were somewhat fortunate, unfortunate, or somewhat different because you were selected to participate in the simulator? Why?, and (7) In what ways did the simulator affect you personally? See Table XVIII, pp. 83-85, for complete results.

In describing the discussion leaders' techniques, participants indicated generally that they were satisfied. Most frequent comment made was that they felt leaders kept out of discussions therefore allowing students to solve the problems themselves.

The group was unsure about whether or not particular discussion leaders would make a difference in the use of the simulation materials.

TABLE XVIII

RESPONSES TO SIMULATOR I EVALUATION INTERVIEW

Comment	Frequency
I. Subjects' Answers to Individual Questions	
1. Please describe and evaluate the discussion leaders' techniques	
a. Instructor did not become involved; he let students solve problems	11
b. Kept discussion "on track."	6
Failed to keep all discussion on track	1
c. Evaluated instructors as good	6
d. Unbiased and/or objective	4
e. Drew out ideas and alternatives	4
f. Informal	3
g. Kept order	3
h. Stated problem and clarified	2
i. Miscellaneous (one each; some confused formal and informal discussion leader)	11
2. Do you believe that the particular discussion leaders had a special effect in this experience or would the experience be basically the same with any discussion leader?	
a. Basically the same	9
b. Somewhat different	5
c. Miscellaneous (one each; some subjects confused formal and informal discussion leaders)	11
3. Please describe the physical set-up of the room and its effects on your performance. Do you have any suggestions?	
a. Satisfactory	10
b. Crowded	9
c. Needs better ventilation	9
d. Chairs were uncomfortable	4
e. Microphone and one-way glass were minor distractions	3
f. Size and arrangement helped maintain informality	3
g. Too much sitting and lack of activity	2
h. Room too light to show films	2
i. Day was too long	1
j. Need larger ash trays	1

TABLE XVIII (continued)

Comment	Frequency
4. Please evaluate the amount and type of work required in this experience.	
a. Too many take-home problems for their actual value	9
b. Fair amount	7
c. Was mentally fatiguing	4
d. Too much work	4
e. Day was too long	4
f. Interesting and valuable work	3
g. Not enough was expected	3
h. Miscellaneous (one each)	4
5. How would you evaluate the scheduling and pacing of this experience?	
a. Schedule was too strictly adhered to	11
b. Day was too long or more or longer breaks were requested	6
c. Good schedule	3
d. Poor schedule	2
e. Good pacing	2
f. Miscellaneous (one each)	6
6. Do you believe you were somehow fortunate, unfortunate, or somewhat different because you were selected to participate in this experience? Why?	
a. Fortunate (total subjects)	14
(1) Broadened outlook, made more open-minded	7
(2) Gained confidence	6
(3) General	6
(4) Learned new techniques	4
(5) Realize problems	3
(6) Miscellaneous	5
b. Unfortunate (total subjects)	3
(1) No chance to visit schools	1
(2) Exhausted me	1
(3) Missed student teaching	1
c. Not decided or neutral (total subjects)	2

TABLE XVIII (continued)

Comment	Frequency
7. In what ways did the simulator affect you personally?	
a. Negative effects physically and emotionally	11
b. Made me more aware of problems and alternative solutions. Less idealistic	9
c. Less home life	4
d. Made me more open-minded	3
e. Increased my confidence	3
f. Have learned to tolerate frustrations	2
g. Miscellaneous (once choice each)	4

II. Interviewer's Summaries

1. The experience seemed to be very rigorous for these student teachers. They were made aware of the problems and the ideas of others and seemed to recognize the beneficial contribution of this. But the pressures which they felt were too great. The discussion leaders appeared to do their job quite well. Physical set-up should be improved by better ventilation.

   Too little time given to very interesting subjects or ropics and too much time given to poorer and less interesting topics.

   The work day was too long for the students and the night work was too extensive.

   Too mentally exhausting.

   Students disliked one instructor's method, but liked the other's method.

2. Project was very profitable, all students were impressed with the program's open character, all were willing to answer questions readily.

   Final question seemed to indicate value of project as all students profited by being made more aware of problems they felt they would meet later in teaching.

   Most expressed concern over the length of the day, but didn't seem abused or overworked. The problem of discussion length seemed too prominent, not enough time was given to important issues, too much to less important questions.

   In general, program was excellent. Much enthusiasm on part of students, one way or another they all took a stand, most students reacted favorably of the interview.

In general participants found the physical setting adequate but not desirable. In answer to question (4), the majority of participants felt too much work was expected although seven felt the amount was fair.

Only three participants were satisfied with the daily and hourly schedule of the simulator. Most felt the day was too long and the schedule adhered to too strictly.

Sixteen of twenty participants felt they were fortunate in participating in the simulator, two were undecided, while two felt they either had been deprived of visiting the school in which they would student teach or were exhausted from participation.

In response to question (7) a variety of effects were noted. Mentioned very frequently were "physical and emotional" exhaustion and that the "simulator made me more aware of teaching problems and alternative solutions." Three participants stated that it increased their confidence and three others stated that it made them "more open-minded."

The summary of participants' responses made by both interviewers emphasize the student's involvement and enthusiasm profit that students felt they derived from the program, and the excessive pressures caused by the schedule and the physical environment.

VII. PERCEIVED EFFECTS OF SIMULATION TRAINING QUESTIONNAIRE

Since the responses of both simulator groups were very similar, the two groups will be combined for presenting the results. The thirty-six respondents' answers to each question will be found in

Table   A summary of the responses to each question follows:

1. How valuable was your simulation experience to you during student teaching?

Most of the responses indicated that the simulation experience was valuable; two felt that the experience was very valuable. Several felt better prepared. Four felt uncertain about the influence of the simulation experience because they could not weigh their experience against not having the experience. Three students felt that no benefit resulted from the simulation experience.

Positive attributes that students saw as arising from simulation included more confidence in approaching student teaching, acquaintance with school routines and records, and knowledge of problems and alternate ways of dealing with them. Discipline and parent-teacher relationships were mentioned as two problems which were of most concern.

2. How would you compare the relative values of student teaching and the simulation experience?

While simulation was generally thought to be a valuable pre-student teaching experience, most of the students felt that simulation could not replace student teaching. Several of the students felt that simulation and student teaching were more valuable when combined with each other. Others felt that each experience had different things to offer. Simulation was seen as being more inclusive of all types of problems, allowing reflection and sharing ideas with peers, and providing for integration of theory and practice. One student felt that simulation was of more value than student teaching while at least fifteen responses could be interpreted as indicating that student teaching was of far more value.

3. How valuable do you consider your simulation experience as a contribution toward making your first year of teaching successful?

Thirty-three students stated that simulation should make a valuable contribution toward their first year of teaching. Two were neutral or undecided as to its value while one felt that student teaching would make the greatest contribution. One student stated, "More valuable than in student teaching. In student teaching students were influenced by the teacher. Routines and procedures have been established. Problems which were discussed in simulation will have more meaning when the student can become a teacher in her own classroom." Other reasons for placing value on the experience were that it helped them gain self-confidence in their ability to meet and solve problems, exposed them to alternative solutions to common problems, helped them to develop their own philosophy, and made them more aware of the whole school system's operation.

4. How does the value of the simulation training compare to other experiences you had in the Brockport teacher education curriculum?

The majority of the students felt that simulation was superior to and more valuable than some or all of the education courses combined. One student felt that "Brockport professors prepare a teacher for teaching." Three students felt that simulation was not as valuable as other courses because there was not the personal contact with students. Again, five qualified their remarks by indicating that student teaching is still more valuable than simulation.

Students felt that for the first time they were able to tie theory and practice together. "It was a summary of four years of teaching training in two weeks." Elaborations were made on this interactive aspect of simulation and the rest of the curriculum where "each does their own job." Simulation appeared to have provided students with realistic situations in which to apply their theory.

5. Please comment on the placement, conduct, and content of the simulation in the light of your increased experience.

Most students answered only one or two of the three parts of this question. Thirteen of the students made general positive comments about the conduct of the simulator. One stated that he had changed to a more favorable evaluation of the simulator after having completed student teaching.

Suggestions for changes in placement were made by ten students. Some students would like to see the simulation spread out during student teaching. Other suggestions include making it at the completion of college or making it longer and less intensive.

Students in the first simulator made more suggestions for improving the conduct of the simulation (these suggestions were used to modify the second simulator). Four of them suggested shorter hours, less rigid scheduling, improving the facilities, and having more effective leaders. Other suggestions from both groups include separating students during the individual response period, encouraging a more serious approach, and having the leaders or others evaluate the responses.

Content was generally seen as good, realistic, useful, applicable, and beneficial. There were suggestions that some problems were repetitious and that a few were too extreme and overly specific. Suggestions were made to include more discipline and grading problems and to add problems on flexibility of daily scheduling.

6. Did simulation training make any difference in your student teaching?

Thirty students responded yes, four responded no, and two were uncertain as to the effect of their simulation experience on student teaching. Most of the responses appear enthusiastic. The most mentioned difference was that they felt more confident--especially in their ability to handle problems. They felt more sensitive to the problems and had a greater variety of approaches available. Understandings of school operation and procedures were acquired.

While one student stated that "in my student teaching I actually saw the simulated problems and another felt that "many times I have wanted to call all the Pats together and have them work on a child in my class," a third student felt that the experience had "no lasting effect."

Other comments were that they knew where to look for help and information, could anticipate and solve situations which appeared to be in the making, and they became more open-minded and able to become really involved in the first assignment.

CHAPTER IV

DISCUSSION

The purpose of this study was to 1) examine the training technique of simulation in order to judge its effectiveness for presenting critical teaching problems and 2) determine whether or not exposure to simulated critical teaching problems has any observable effect on the participants' behavior. To achieve this purpose, four major activities were undertaken--1) critical problems of beginning teachers were identified; 2) a fifth grade teaching situation was simulated which incorporated the critical problems; 3) the effectiveness of the simulation experience was tested experimentally; and, 4) the effectiveness of the simulation techniques was judged by subjects and the experimenters.

I. IDENTIFICATION OF CRITICAL PROBLEMS

Selection of the critical problems through the Perceived Problems Inventory appeared to be very effective for the purpose of this study. The use of descriptive statements phrased in the teachers' words and from the teachers' viewpoints created some difficulty when the actual problem had to be recreated as an incident. The lack of a one-to-one correspondence between the statements and actual classroom incidents in one case resulted in two problems being combined into one incident. Using the instrument only on first year graduates of Brockport State College, limits the generalizability of the results to this group or very similar groups. It is possible that another group may have different problems and that the technique of simulation may be more or less effective in dealing with these problems.

A major weakness of the present study arose through the use of these problems of beginning teachers with student teachers. Many of the problems such as those involving parent conferences are not concerns for student teachers since they do not engage in these activities. Therefore, testing these items during student teaching was inappropriate. A follow-up study was originally planned to compensate for this deficiency but this was not conducted due to a lack of funds.

II. CREATING THE SIMULATION

Producing the simulation proved to be a major undertaking because of the need for a strict attention to details. Cooperation of public school authorities was excellent. It appears to be an impossible task to develop an accurate model without using an existing school system. Using a specific school system also resulted in a limitation since the system itself could not be so general as to not lend its characteristics to the model. The simulation model became a suburban fifth grade situation.

The use of videotape recorders proved to be a great aid in producing satisfactory incidents with a minimum of time and expense. Use of the camera as a representation of the teacher's view of the situation presented many difficulties but appeared to provide the realism required to insure involvement in the simulation. Role playing required special information cards in order to define the incident sufficiently so that subjects could identify the problem and have common information with which to work. Written incidents were the simplest to produce. Use of the in-basket technique did not appear appropriate with the role of the teacher.

Attempts at gaming were difficult due to the nature of the problems.

There was not a small group of correct or incorrect answers to any of the problems. Without this small set of predictable actions it is difficult to game. Therefore, the simulation had to be an open role simulation depending on group or trainee-instructor reaction for feedback. It would be possible to analyze responses of students and experienced teachers to these incidents and create a game format using these responses.

Problems of sequencing the incidents and developing a schedule for the simulation proved to be more difficult than anticipated. The requirement of equal time for each incident imposed by the restrictions of the experiment was seen as lessening the effectiveness of the material.

III. TESTING EFFECTS ON STUDENT BEHAVIOR

A randomized control group pre-test post-test design was employed using a random sample of twenty experimental and twenty control subjects each for both the Fall and Spring semesters. Negative feelings toward the project arose because those selected had to wait until their senior year to student teach. A few of the subjects left the college making the groups unequal. Student teaching time was used because of the convenience of placing the two week simulation and the opportunity to observe students in a classroom situation.

The hypothesis that exposure to simulation training would make students more effective as beginning teachers was tested using five consequences during their semester of student teaching.

The results of the first consequence are the only ones that provide statistical support for the hypothesis. Three of the four tests reject the null hypothesis including both of those involving the supervising teacher, therefore, it appears that exposure to simulation may make student teachers perceive themselves and will make them perceived by their supervising teachers as having fewer problems than other students. For an unexplained reason, there appears to be some other factors working in the self-report PPI. Possibly, the better the student is functioning the more open he is to admitting difficulties. At least this interpretation appears sensible if it is assumed that the supervising teachers' scores are fairly accurate. The validity of the self report for comparing groups appears to be in doubt since either student teaching or simulation may sensitize students to problems and the student's openness may affect the number of problems he is willing to perceive.

Instruments used in testing consequence two were possibly too broad for detecting the effects of a two week experience on a group of twenty subjects. The first test of general teaching performance was made using the Classroom Observation Record. Groups II S^s just missed having a significantly better total score than the C^s at the .05 level. The specific items they did not achieve significance in were not given any support by data collected from Group I. Unfortunately, the second and fourth quarter supervising teachers were not trained in using the COR. According to the Mean Potential Teaching Index scores given to second quarter S^s the teachers perceived them as having superior potential to the C^s. The MPTI scores showed no significant difference as might be expected since it is in practice virtually a three point scale. It is interesting to note that college supervisors scores are in all cases lower than the supervising teachers' and that, while the teachers tended to rate the S^s higher than the C^s, the college supervisors rated them a little lower.

Consequence three stated that simulation training would develop more positive feelings and was tested using both the semantic differential scale and the MTPI. The semantic differential or adjective scale required a rather long time to administer, proved confusing to some subjects and yielded no differences that could be considered significant when the test was considered as a whole. This is evidenced further by attempts to interpret such findings as that the C^s perceived Pat Taylor (whom they had never heard of) as more chaotic than the S^s or that there is not a single overlap between Groups I and II for any significant item. The most interesting finding is not that there was no difference between the groups, but that there was no noticeable change over the semester of student teaching.

A similar finding is shown in part II of consequence two. Neither group makes any significant changes in their attitude toward youth during the semester although the control group tends to become more negative. Studies by Turner[1] postulating reality shock and by Osman[2] postulating a relationship between satisfaction and attitude change lend credibility to the possibility that simulation may serve to "innoculate" the student teacher against these negative factors. The lack of specific changes on the semantic differential also lend support to this interpretation as does the possibility that the increase of perceived problems by S^s was the result of a more open, less threatened feeling on the part of the S^s. Of course, this remains pure conjecture.

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[1] Richard L. Turner, et al., Skill in Teaching, Assessed on the Criterion of Problem Solving: Three Studies, Bulletin of the School of Education, Indiana University, Vol. 39, No. 1 (Bloomington, Indiana: Indiana University Press, January 1963).

[2] Robert V. Osman, "Associative Factors in Change of Student Teachers' Attitudes During Student Teaching" (unpublished Ed.D. dissertation, Indiana University, Bloomington, 1959).

Contrary to Vlcek's[3] findings, the test of consequence four that S^s will be more confident did not find any support from the data collected on the Confidence Scale. Again, there was no significant gain or loss in confidence over the period of student teaching. If S^s did not believe that they had specific answers to those problems, there is no reason to believe that they should feel more confident from their encounter with the simulated incident. It may be that these findings differ from Vleck's for his students were provided with approved solutions to their problems before they left the simulation. In the present study, many students merely found new aspects of the problem or discovered that the intuitive approach was not effective.

Consequence five stated that the simulation group would be ready to assume full-time responsibilities for student teaching sooner was based upon the findings of Kersh.[4] When days spent in the simulation were counted as days of student teaching, the S^s took longer during their first quarter and for the total of both quarters. The difference was significant only for Group II during the S^s first quarter. During the second quarters the S^s appeared to assume responsibility sooner, but not significantly sooner, than the C^s. If the ten days spent in the simulation were not counted as days of student teaching, the S^s would have assumed responsibility sooner in all cases and the difference would have reached significance favoring

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[3] Charles W. Vlcek, "Assessing the Effect and Transfer Value of a Classroom Simulator Technique" (unpublished doctoral dissertation, Michigan State University, 1965).

[4] Kersh, op. cit.

Group I S^s during the first quarter. It appears that adding the simulation did not lengthen the time it took for the student to assume full responsibility in the classroom. Therefore, it appears that simulation added a new dimension to the program without interfering with the established program.

The relative lack of change between administrations for both groups was unexpected. Possibly the instruments were too gross for the sample size and time involved or the selection of consequences was in error. It is also possible that student teaching actually has little effect on concepts, attitudes and confidence as tested in consequences three and four.

Another possibility is that the true effect of the simulation training will not become apparent until the first year. While it is more likely that the specific traceable effects will decrease over time, a generalization of training may occur in the S^s increasing their effective anticipatory behavior. Smith in describing anticipatory behavior states, "One of the most significant indications of an effective decision-maker may lie in his ability to identify potential situations and to develop appropriate strategies for dealing with them well in advance of their actualization."[5] This concept may also provide a partial explanation for the discrepancy between self and teacher reported problems. The sensitized person sees the possibility of the problem before it has actually developed far enough for an observer to notice it.

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[5] Gerald R. Smith, "An Analysis of Research on Decision Situations and Processes." Paper read at the American Educational Research Association Meeting, New York, New York, February 1967, p. 20.

In conclusion, the effectiveness of this simulation as tested using the described instruments, was at least as great as an equal period of student teaching; it did not reduce the effectiveness of student teaching; and the S^s undergoing the simulation had significantly fewer problems as reported by their supervising teachers than did the C^s.

IV. EFFECTIVENESS AS A TEACHING TECHNIQUE

Observation of the students during the simulation indicated a very high degree of involvement. A few unexpected things were observed. First, the students did not identify with Pat Taylor. This fact is corroborated by the lack of change in the concept Pat Taylor on the S^s Adjective Scales. Second, and not entirely unexpected, all problems do not require the same amount of time. A few incidents dragged while discussion of others was cut off just as they were getting highly productive. This rigid scheduling may have made the simulation less effective. Third, after the students got into the role and understood the routine, they were able to take it over themselves with the aid of the "instructor." When the experimenter arrived late after being delayed in his college class, the members of the simulation had already started on the next incident to keep with the schedule. They continued conducting it for a few days. Fourth, initially the students wished to be very dependent upon the instructor. It took the first three days for them to learn that they could find no support (except in group process) from him and run their own discussion. Fifth, group process developed rapidly. Most of the members of the simulation had never worked in a group (more than an hour in a college class). Thus, working in groups was a new experience and their increased skills an important by-product of the experience that should have an effect on their ability as faculty members. Sixth, closely allied to their development of group skills was their obvious increase in ability to perceive the problems and philosophy of others. The ability of the simulation to develop these last two dimensions should be empirically tested as they may be more important variables than those actually tested. Seventh, there was evidence that combining the simulation with actual field experience may increase its effectiveness. Parents, who have experience with the school, and subjects who had experience teaching in Sunday Schools or camps tended to add more to the discussion and proved to be valuable resources to the group. It might be stated that they indicated that this simulation has certain limitations in recreating reality. While gaming might increase the reality of the simulation, simpler and more efficient changes might include integrating field experiences with the simulation or involving experienced teachers in the group. The notion of involving experienced teachers or integrating field experience receives support from the findings of Dill and Doppett[6] concerning the Carnegie Tech Management Game. They found that players reported learning many kinds of things from their experience, but learning derived more from interpersonal interactions with other players and with outside groups than from interaction with the game model itself. Finally, there appeared to be a carryover of group techniques and role playing into the student teacher's classes.

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[6] William R. Dill and Neil Doppett, "The Acquisition of Experience in a Complex Management Game," Management Science, 10:30-46, 1963.

Reports of the students' reactions to simulation training were, in general, very highly favorable. Immediate reactions to the simulation were highly positive, with three elements being not so positive. The students did not feel that the simulation was as real or life-like as the experimenter had expected. This finding reinforces the observation that they did not take the role of Pat Taylor. A high degree of realism was not actually necessary; the students learned to "play the game." Much of the learning was interpersonal. The second element was obvious to even casual observers. The surroundings were uncomfortable. It became hot and smoky in the morning and by early afternoon the chairs were very uncomfortable. Special care needs to be taken for members of groups that spend eight hours in one classroom and mostly in one chair. The third finding was also obvious to observers. The students were becoming physically and emotionally exhausted as the second week started. The involvement was extremely high resulting in a great amount of tension, as evidenced by the Bufferin bottles that appeared on each table daily.

The interviews also reflected the students' acceptance of the simulation on instructional technique, their exhaustion and physical discomfort.

Responses to the Perceived Effects of Simulation Training Questionnaire tended to reconfirm the original findings. One difference was that three of the thirty-six respondents felt that they gained no benefit from the experience. A new dimension was added by students' suggestions that student teaching and simulation had different things to offer and should be combined. Trends in the raw data could be interpreted to support this idea of integrating student teaching and simulation to obtain the maximum benefits of each. There appears to be a discrepancy between the data received on the _Confidence Scale_ and that written on this questionnaire in that a majority of students responded that simulation made them feel more confident.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

I. CONCLUSIONS

1. The major conclusion to be drawn from the initial activities of this study is that problems of beginning teachers can be identified which are satisfactory for use in developing simulated incidents. Minor problems arise in interpreting the actual meaning of the statements used on the Perceived Problems Inventory, but use of the instrument results in a group of problem statements that are significant and apparently stable.

2. Development of a role simulation appears to be feasible for colleges or school districts through the use of materials modeled on an existing situation and video tape recordings.

3. The simulation training proved to be at least as effective as an equal period of student teaching in the areas of attitude change, confidence, teaching behavior, and amount of time needed to assume full teaching responsibility as a student teacher, but the students who underwent simulator training experienced significantly fewer teaching problems as reported by their supervising teachers than did the control group students.

4. Students became highly involved and stimulated by the simulation.

II. IMPLICATIONS AND RECOMMENDATIONS

1. Changes recommended in the developed simulator include minor rescheduling of some incidents so that the background information that

is needed in those incidents is more familiar to the participants and that skills such as role playing are developed more fully prior to incidents that require participants to take difficult roles. A revision of the duties of the instructor or simulation director is needed so that he can more efficiently use his talents and still not interfere with the groups' independence. One change in this role that may help to make the simulation more effective is to allow the instructor to schedule incidents according to his analysis of the needs of the participants. He might also provide special assignments, theory sessions or other experiences to strengthen areas of weakness he finds in the participants' performance.

A complete revision of the materials might be desirable in order to have them emphasize a specific set of principles. In this case the response sheets would need to be completely altered as well as the scheduling of the incidents.

2. The placement of the simulation in the program did not appear to be ideal. Much could have been gained if the participants had had classroom experience. Some method of combining student teaching and simulation so that they mutually strengthen each other should be found.

3. Since the problems simulated were those of first-year teachers and the goal of the teacher education sequence is to produce effective teachers, a follow-up study should be undertaken to ascertain the effect of simulation training on the participants during their first year of teaching.

4. A possible implication from the remarkable finding that

student teaching did not create any significant changes in either the control or experimental groups is that new techniques need to supplement or supplant the present student teaching. Possibilities for use in this role are such techniques of proven effectiveness as micro-teaching[1] and interaction analysis[2] along with specially developed simulations.

5. Other uses of the simulation materials have been explored or suggested. Gafga[3] utilized the second simulation group of this project to investigate the effectiveness of the simulated setting to observe student teacher behavior and concluded that: 1) behavior can be observed effectively in simulated setting as later exhibited in regular student teaching; 2) simulation does produce a change in the critical behavior of student teachers; and 3) the simulated setting is an effective means for observing behavior when compared to the ratings by college professors. Simulation may provide a means for observing teaching behavior in order to screen, predict, or evaluate a teacher's behavior within a specific situation.

School systems may replace the original background materials with their own and use the simulator as a pre-school induction program for new teachers. This special effort appears to be justified by the recent emphasis placed upon the needs of the beginning teachers and the traditionally ineffective methods with which these needs are met by the school.

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[1] Robert N. Bush and Dwight W. Allen, Micro-Teaching: Controlled Practice in the Training of Teachers (Stanford, California: Stanford University, 1964)

[2] Ned A. Flanders, Helping Teachers Change Their Behavior (Ann Arbor: University of Michigan, 1963).

[3] Robert M. Gafga, "Simulation: A Method for Observing Student Teacher Behavior" (unpublished Ed.D. dissertation, The University of Tennessee, Knoxville, 1967).

An informal study of the problems of experienced teachers indicates that the set of problems selected by beginning teachers are similar to those of the experienced teacher. Therefore, the simulation should also serve as an in-service workshop. It may have especial value when used by full faculties with their own school's background material in that they may: 1) highlight problems that require the staff's attention; 2) provide a vehicle for integrating the school's philosophy; 3) assist the faculty in becoming a more cohesive group through improved group dynamics; as well as 4) improving the staff's ability to handle selected teaching problems.

The materials may also be standardized to a greater degree and used as a vehicle for research into teaching behavior. Although many case studies and a Teaching Situation Reaction Test exist for this purpose, these methods emphasize the more static dimension of knowledge rather than behavior. Borg and Silvester[4] have developed a similar set of materials for this purpose using the role of the school principal.

6. Other simulations need to be developed using different models than the self-contained classroom in the suburban elementary school.

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[4] Walter R. Borg and J. Arthur Silvester, "Playing the Principal's Role," Elementary School Journal, LXIV (March 1964), 324-31.

Particularly needed is an inner-city simulator to serve the purpose of orienting teachers to the special needs of disadvantaged students. It may also aid in selection of teachers for these schools. The high school, rural school, and special school are other obvious models to simulate.

Simulations based on other extant simulations but quite different than this simulator that might prove valuable are, for example, a Teacher-Student Game based on the Parent-Child Game[5] and an Educational Career Game similar to the Life Career Game.[6]

7. A great amount of basic research needs to be done on the dimensions and effectiveness of simulation as a teaching tool. While some of this research has been done and other research is presently underway, it has been hampered by a lack of satisfactory descriptive classifications for various types and aspects of simulation and gaming.[7] This same confusion has resulted in a less effective evaluation of the present simulation and threatens to create difficulties in helping teachers use simulation and gaming techniques in their classroom.

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[5] Sarane S. Boocock and E. O. Schild, Simulation Games in Learning (Beverly Hills, California: Sage Publications, 1968).

[6] Ibid.

[7] Meredith P. Crawford, "Dimensions of Simulation," American Psychologist, XXI (1966), 788-796.

CHAPTER VI

SUMMARY

Broadly stated the purpose of this study was to (1) examine the technique of simulation in order to judge its effectiveness for presenting critical teaching problems and (2) determine the effect of exposure to simulated critical teaching problems on the participants' teaching behavior during student teaching.

The study had three major phases: (1) the identification of critical teaching problems; (2) the development of a simulated fifth grade situation; and (3) the testing of the effects of the simulation experience on student teachers.

Phase one of the study was accomplished using a self-report instrument, the Perceived Problems Inventory, with 163 of the 282 first year graduates of the State University College at Brockport, New York. A Chi Square analysis of the 117 items yielded thirty-two significant problems.

The second phase of the study, the development of a simulated fifth grade teaching situation and the creation of the incidents portraying the critical teaching problems, consumed the major portion of the efforts of the writers. A suburban school district provided the materials which were instrumental in creating the hypothetical school and its locale. Two filmstrips were produced to introduce the participants to the district and the school. Cumulative record cards, a faculty handbook, a curriculum guide, sociograms of the hypothetical class, examples of students' work, a pupil personnel manual, and an audio-visual catalog were used to create the classroom setting. Each of the thirty-two critical teaching problems were developed into incidents which were presented through videotapes, role plays and written materials. A schedule for presenting these incidents and a problem-solving method were also developed.

Phase three involved testing for the certain behaviors which seemed tenable as a result of other research studies employing simulation. The hypothesis to be tested was stated as consisting of five consequences as follows:

> If student teachers are given pre-student teaching opportunities to encounter, analyze, and attempt to solve critical teaching problems presented through a simulation technique then
>
> (C_1) such problems will be less numerous
> (C_2) general student teaching performance will be improved
> (C_3) they will develop more positive feelings toward concepts related to such problems
> (C_4) they will be more confident
> (C_5) they will be able to assume full-time responsibility for student teaching sooner.

In order to test these five consequences, a randomized control group pre-test-post-test design was involved using a Fall and Spring field test. Two samples of forty participants were selected randomly among elementary and early secondary majors at State University College at Brockport, New York. These students were then randomly assigned to control and experimental groups. A test of grade point averages verified the randomization. The experimental groups reported to a special room for the first two weeks of their student teaching assignment. The control groups reported to their regular student teaching assignments. Both groups were pre-tested prior to student teaching and tested again after the two weeks that the simulation took, and at the completion of both quarters of student teaching.

Results of these tests generally favored the experimental group but achieved statistical significance only for part of consequence one. Responses from those involved in the simulation were highly favorable.

The study proved very successful in achieving its first purpose. It was possible to identify and simulate critical teaching problems in a manner that involved and stimulated students. The second purpose does not appear to have such clear-cut results. Of the five consequences, only the first--that such problems will be less numerous--received any statistically significant support.

It is interesting to note that neither student teaching nor simulation and student teaching combined resulted in many significant changes as measured on the instruments used in this study. Either the lack of power in the instruments or the selection of consequences may be the cause for this lack of results. Another cause for the failure of the experimental groups' results to achieve significance is the fact that the simulation was based upon problems of beginning teachers rather than student teachers. Differences may yet appear in their first year of teaching.

Observation of the simulator, responses of participants, and evidence drawn from experimental data indicate the possibility that two changes might increase the effectiveness of the simulator. First, the simulator should be divided so that both student teaching experience and simulated experience are used to reinforce each other. Second, there needs to be some way to control the simulation experience and additional information input to meet the needs of the subject. The instructor took no active part in these two field trials. The materials were used as a complete package using a pre-arranged schedule and sequence. The second group actually ran their own workshop for a couple of days without any instructor assistance. A more active role for the instructor as coach or diagnostician appears to be advisable.

Other uses for this simulation, such as using it to predict success in specific situations, and new simulations that need to be developed were suggested. The practicality of school systems and colleges developing their own simulations was demonstrated. Finally, the need for more basic research into the dimensions of simulation as a training technique was mentioned.

In conclusion, it can be said that the simulation training when tested under the most stringent conditions was an unqualified success as a teaching device that motivates and involves students and that, although simulation was only partially successful in changing the student teachers' behavior, it was at least as effective as an equal amount of student teaching. Changes in the materials, placement in the program and in the role of the instructor promise to increase the overall effectiveness of this set of simulation materials in future trials.

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APPENDIXES

APPENDIX A

A PARTIAL LISTING OF SIMULATION PROJECT ACTIVITIES BY DATE OF COMPLETION

A Partial Listing of Simulation Project Activities

by Date of Completion

Date of Completion	Activity Description	Activity Number
2- 1-65	Develop Persistent Problems Inventory	1
3- 1-65	Establish reliability of PPI	2
4- 1-65	Revise PPI	3
4- 1-65	Identify 1964 SUC Brockport graduates	4
4-29-65	Orient total project staff	74
5- 1-65	Mail PPI to 1964 graduates	5
5-15-65	Select graduate assistant	70
5-21-65	Send reminder to 1964 graduates failing to respond by May 20, 1965	6
6- 1-65	Select school system for simulation	12
6- 1-65	Select school to be simulated	14
6- 1-65	Select secretary	71
6- 7-65	Coordinate project with coordinator of student teaching	32
8- 1-65	Analyze PPI	7
10- 1-65	Select persistent problems for simulation based upon PPI analysis and adaptability of simulation techniques to problem areas	8
10- 1-65	Revise or make community background material for simulated school system (including film)	13
11- 1-65	Revise or make background material (including slides and tape) on simulated school	15

11- 1-65	Simulate pupil background material to include cumulative records, etc.	16
12- 1-65	Write simulated problems	9
12- 1-65	Conduct library research on simulation	11
4- 1-66	Revise classroom observation record	18
5- 1-66 for S_1	Select student sample	33
5- 1-66 for S_1	Select cooperating teachers	72
5- 1-66	Provide meal opportunities for SE_1-SE_2 during Simulators	75
5- 1-66 for S_1	Help SE's find housing during Simulator	76
5- 2-66 for S_1	Randomly assign students to SE and SC groups	34
5- 2-66 for S_1	Obtain grade point average of students	35
5- 2-66 for S_1	Check randomness of sample	36
5-15-66	Orient fifth graders for role acting	10
6- 1-66	Prepare simulated classroom	17
6- 1-66	Produce simulated problems	82
8- 1-66	Develop semantic differentials to measure concepts held about classroom problems, student teaching, beginning teaching, and self	41
8- 1-66	Develop MTAI	49
9- 1-66	Develop Simulator	26
9- 1-66	Train experimenters in techniques of reflective discussion	27
9- 9-66	Pretest SE and SC groups with semantic differentials and MTAI	42

9-10-66 for S_1	Orient supervising teachers to use classroom observation record	19
9-12 - 9-23-66	Conduct simulators	83
9-23-66 for S_1	Post test SE group SD, CS, RS, and interviews. Get SC group post tests by mail	43
10-20-66	Rate students during ST using COR	21
11- 1-66	Analyze results of semantic differentials	44
11- 1-66 for S_1	Analyze MTAI data	52
11-10-66	Obtain PPI self ratings, supervising teacher PPI, CS, COR, STER and AFR	79
11-15-66	Analyze self-ratings on PPI. Analyze cooperating teachers PPI's, COR, CS, STER, AFR	80 87

APPENDIX B

PERCEIVED PROBLEMS INVENTORY

Perceived Problems Inventory

Dear Graduate:

The following problems have been reported by first year teachers. Some of them may be problems you feel also. The intention of this checklist is to find out in what areas our graduates are experiencing difficulties so that we perhaps may be able to make adjustments in our teacher preparation program. For this purpose, we need your help in an honest reaction to this checklist.

Please read each item carefully.

If you find this is a serious ongoing problem: Place an X under 1

If you find this a moderate problem: Place an X under 2

If you find this only a minor problem: Place an X under 3

If you find this no problem at all: Place an X under 4

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
Example				
Feeling insecure in teaching spelling.		X		

- -

List of Reported Problems

1. Having children follow routines for entering and leaving the classroom when coming from home or leaving for home.				
2. Lacking enthusiasm for a subject.				
3. Needing help in selecting instructional materials.				
4. Working out a daily schedule.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
5. Discussing with parents their children's achievement.				
6. Explaining my grading system to children.				
7. Having students see relationship between undesirable behavior and the consequences.				
8. Not really liking kids.				
9. Managing the distribution and collection of materials, paper, milk, etc.				
10. Involving many of the children in group discussions.				
11. Finding films and filmstrips related to the area being studied.				
12. Getting students to do homework.				
13. Criticized by parents.				
14. Collecting anecdotal background information about students.				
15. Maintaining order during field trips.				
16. Unhappy teaching in lower socio-economic district.				
17. Keeping pupil attendance records accurately.				
18. Not knowing what to do with students who finish early.				
19. Finding out about radio and T.V. programs related to daily classwork of my children.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
20. Planning and executing useful field trips.				
21. Bothered by parents telephoning.				
22. Not knowing how to evaluate my objectives.				
23. Students not respecting me.				
24. Disturbed by school regulations.				
25. Ordering, securing, and accounting for supplies and equipment.				
26. Too much stress on grades for motivation.				
27. Integrating A-V materials into the lessons.				
28. Working out details of assembly programs.				
29. Talking with parents I wish to contact.				
30. Judging children's progress in terms of my aims and purposes.				
31. Having children maintain quiet while working independently.				
32. Feelings of insecurity.				
33. Managing the transition from one activity or subject to another.				
34. Relating the subject meaningfully to children.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
35. Finding appropriate reading materials for readers one or more years below grade level.				
36. Finding out what content I am supposed to cover in my grade.				
37. Establishing a rapport with parents so that they will provide information candidly and without embarrassment.				
38. Feeling uncomfortable about giving failing grades.				
39. Finding ways to integrate isolated, disliked children in group activities.				
40. My feelings being hurt by criticism.				
41. Organizing an orderly procedure for children to hang up their wraps.				
42. Not knowing how to deal with reading problems.				
43. Being unable to complete a lesson.				
44. Helping parents understand the reporting system of my school.				
45. Involving pupils in self-evaluation.				
46. Knowing how to hold student conferences.				
47. Unhappy about teaching at this present grade level.				
48. Unhappy with routine classroom bookkeeping.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
49. Being afraid to teach controversial subjects.				
50. Having work for some children while I am working with other groups or individuals.				
51. Difficulty in identifying those who need remedial help.				
52. Feeling unpopular as a teacher.				
53. Not wanting a certain student in my class.				
54. Formulating questions that provoke discussion.				
55. Needing to know how to organize a unit of work.				
56. Identifying children in need of psychological testing or counseling.				
57. Having difficulty with grouping.				
58. Having activities ready for children's rest-time periods.				
59. Bothered by frustration in my personal life.				
60. Not really knowing how to teach.				
61. Unhappy about teaching slow learners.				
62. Difficulties with organizing supplies and materials.				
63. Introducing a new topic and obtaining high interest.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
64. Obtaining the materials for making my own teaching materials, e.g., construction paper.				
65. Having difficulty preparing lesson plans.				
66. Conducting an interview with a parent.				
67. Having trouble interpreting children's capabilities to parents.				
68. Handling cliques in the classroom.				
69. Not being accepted by my colleagues.				
70. Handling children in passing in hall from room to room.				
71. Differentiating instruction among the slow, average and gifted children in class.				
72. Constructing bulletin boards.				
73. Finding out what the objectives of education are for my grade.				
74. Helping a student with a destructive home situation.				
75. Being able to prepare classroom tests that are valid.				
76. Handling children's aggressive behavior toward one another.				
77. Feelings of inferiority.				
78. Organizing procedures for moving as a class from place to place.				

	a serious problem	a moderate problem	a minor problem	no problem
	1	2	3	4
79. Students not willing to work.				
80. Finding materials with which to prepare simple science demonstrations.				
81. Lacking understanding of my subject(s).				
82. Explaining my techniques of teaching to parents.				
83. Interpreting the results of standardized tests.				
84. Handling children who waste school materials.				
85. Being impatient with my students.				
86. Teaching in an area for which I am unprepared.				
87. Unable to operate A-V equipment.				
88. Parents complaining about homework assignments.				
89. Getting parents to take an interest in their children's behavior.				
90. Telling parents that their children have problems.				
91. Handling the constantly disrupting child.				
92. Being able to tolerate student errors.				
93. Having difficulty with written communication.				
94. Finding out about community resources that I can use in my teaching.				

		a serious problem 1	a moderate problem 2	a minor problem 3	no problem 4
95.	Finding out what content children in my class covered last year.				
96.	Being troubled by parental complaints.				
97.	Using test results and anecdotal information in working with individual children.				
98.	Needing more understanding of student behavior.				
99.	Being unable to adjust to certain ethnic groups.				
100.	Using the committee method with children.				
101.	Not understanding the value of a planbook.				
102.	Enlisting parent aid for activities such as trips, making costumes for a play, or class mother.				
103.	Being required to grade on a curve.				
104.	Working with overly dependent children.				
105.	Bothered by feelings of loneliness.				
106.	Having difficulty with oral communication.				
107.	Planning segments of work for a week or longer.				
108.	Having a distaste for grading papers.				
109.	Being afraid of some of my students.				

	a serious problem	a moderate problem	a minor problem	no problem
110. Bright students make me feel uncomfortable.				
111. Unable to maintain pupil interest.				
112. Lacking know-how for pupil-teacher planning.				
113. Having trouble controlling class.				
114. Inability to keep up professionally in my field.				
115. Not being prepared to teach under newer instructional organization (e.g., team teaching).				
116. Having difficulty organizing my work.				
117. Feeling nervous when supervised.				

APPENDIX C

FILMSTRIP--"SPOTLIGHT ON EDUCATION IN MONROE"

Slide Script for "Spotlight on Education in Monroe"

Slide	Narrative
1. Simulation Project	None
2. Spotlight on Education in Monroe	None
3. Presented by Monroe Board of Education	None
4. Dr. Black (superintendent) at desk with new teachers	My name is Dr. Raymond Black. As superintendent of schools, I welcome you on behalf of all the professional staff and parents of our district.
	Last year, Mr. Smythe, our coordinator of personnel, visited college campuses all over the United States in search of the best candidates for teaching positions here in our schools. You are among the few chosen from the hundreds of applicants we received. This is a credit to you, to your families, and to your college.
	As new residents of the Town of Monroe, we thought you might like to know something about the community and, of course, about our schools.
5. Map of Monroe	With 70,000 inhabitants, our township is the largest, as well as the fastest growing in the county. Belle Lake forms our northern boundary. The lake affords our residents with opportunities for boating, swimming, and fishing. There are several small bays and ponds along the shoreline that abound with birds and small game.
	To our south and east is the city of Elton, with a population of over 300,000.

6.	Aerial view of Elton	Elton, as you may know, is an industrial and commercial center. Most of the residents of our town commute to jobs in the city. Elton has many outstanding cultural resources including a world famous school of music which is associated with the city University. You will find that many of your students will have visited Elton to see the museum, art gallery and historical places of interest.
7.	House and farm in Monroe (1)	The Town of Monroe itself from which the Monroe Schools draw their students is in a sprawling area formerly composed largely of farms. Since World War II, however, many homes have been built which are beginning to fill up the once open fields.
8.	House and farm in Monroe (2)	
9.	Church	As you drive through the town, you will see that we have many churches ---
10.	Shopping Plaza	and shopping plazas.
11.	Post Office	We have a new post office on Column Blvd.
12.	YMCA	And a new YMCA on Round Pond Road.
13.	Town Hall	The Town Hall is located on Niagara Road. It houses the offices of the town government and the town police department.
14.	Town Library	Immediately behind Town Hall is the new library. The people of Monroe are making a real effort to make our library one of the finest in the county.
15.	Homebuilding	Approximately 7,000 new homes have been constructed in Monroe in the last 10 years. This rapid rate of growth has given Monroe the largest population as well as area of any town in the county.
16.	Bulldozer and School	With the rapid growth of population you might suspect that our school population is growing too. You are correct. In fact the school population is

	increasing at such a rate that we need to build at least one new school each year.
17. Town residents in yard	The people of our town come from a variety of backgrounds. They are a blend of second and third generation families, mostly of northern and central European stock. They are primarily skilled workers. And there are a good percentage of professional men. Most have completed high school and many have high expectations for their children. Presently about 50 percent of our high school graduates go on for further education.
18. "Success Each Day"	As a result of these high aspirations, our teachers are pledged to provide the best possible education for children. One of our mottos is "Provide each child with success each day."
19. AV display	A good education costs money. It requires not only the best teachers, but also the best materials and equipment available.
20. Nurse	A good educational program also requires a specialized supporting staff of nurses, psychologists, social workers, and other therapists.
	You must find ways to make full use of the materials and supporting staff that are at your disposal to make teaching and learning more effective.
21. Science Lesson	We hope your classroom program will provide moments of discovery and excitement----
22. Group work	and opportunities to practice and learn by working together to solve common problems and---
23. Listening lesson	moments of pure pleasure and satisfaction for children.

24. Central Office Staff	The members of the Central Office Staff of our school district are available to help you in any way they can. They are specialists in the areas of teaching and curriculum. They, as I, want you and your students to have a successful and rewarding experience in the Monroe Schools.
25. New Teachers	You have much to do in the days ahead. You must become familiar with your new building, fellow teachers, and students. Foremost, however, you must plan exciting and worthwhile experiences for youngsters.
26. Superintendent and New Teachers	Soon you will meet with your building principal. He will give you more information about the work that is ahead. Give him your best efforts. Again, let me wish you well in the days ahead. The problems you face will be many and complicated, but with patience, understanding, and a good sense of humor, you'll achieve some wonderful moments for yourselves and your students.
27. The End.	

APPENDIX D

FILMSTRIP--"WELCOME TO LONGACRE SCHOOL"

"Welcome to Longacre School"

Slide	Narrative
1	Focus Frame
2	Project Identification Frame
3	Welcome to Longacre School
4	Welcome to Longacre School. I am Mr. Jones, the principal, and it is my pleasure to show you the school where you will teach and to describe some of its program and staff.
5	Longacre is a 600-pupil school and contains grades kindergarten through six. The building contains 20 classrooms, a combined cafeteria-auditorium, a gymnasium, a library, a vocal music room and offices.
6	Longacre is located in one of the most densely populated neighborhoods in Monroe which, as you know, is experiencing rapid growth. Most of the houses near the school were built in the late forties and early fifties.
7	The typical home in our neighborhood has two or three children. In many of the families, both parents work.
8	Due to the rapid population growth, a large number of apartment houses are being built in the vicinity of the school. You may have noticed some north of the school when you arrived.
9	Most of the children who attend Longacre live close enough so they are able to walk to school.
10	A very few children in the primary grades who live farther away come to school by bus.
11	At Longacre, we begin the school day at 8:10 with the playing of "Call to Colors" over the public address system.

12 In each classroom this is followed by the pledge to the flag.

13 The kindergarten classes are on half-day sessions. As you know, pupils at this age enjoy discussing and sharing experiences they have had.

14 We believe the most important part of any elementary school program is reading. Reading gets underway very early in the year in our classrooms.

15 By the time children enter second grade, they have learned many reading skills.

16 We believe in giving as much individual help as possible. Our teachers constantly are aware of children who are encountering learning problems.

17 As you know, by the time children enter the intermediate grades, they have gained skills in communicating what they have learned to other members of the class.

18 Child-directed activities are common in Longacre and strongly are encouraged.

19 By the time our students leave Longacre, we hope they have become greatly independent of reliance on teacher direction.

20 You will have the opportunity to work with many special teachers who help to enrich our program. The librarian, Bonny Richardson, will meet your children at least once each week in order to acquaint them with library skills and to encourage their interest in reading independently. Certain periods are set aside each day when individual children may visit the library to use reference materials and get special help in locating information.

21 Winifred Turner is our art teacher. Once each week, she will visit your classroom with her cart loaded with materials and supplies. She is a fine person and one who will do her best to release creativity in your children.

22 Annette Norgreen, the vocal music teacher will have your children twice each week. She is most willing to help you in your classroom whenever you wish help in teaching songs which might be related to your class work.

23 The children go to gym twice each week. Boys and girls go separately. Since your children go to gym with Mr. Deal's class, you will want to work out details with him. Mr. Allen Zimmerman is the physical education teacher.

24 Doris Dickson conducts daily remedial reading classes for children having unusual reading problems. She works cooperatively with the teachers of these children to ensure the best possible reading program.

25 You will find that many of your children play instruments in the band or orchestra. John Helper has had good success and we are proud of the instrumental program at Longacre.

26

27 Joan Collins is the speech therapist assigned to our school. She works with children individually or in small groups in order to improve or correct speech patterns.

28 An important part-time worker in our school is Harold Kay, our psychologist. He will work with students who may be experiencing psychological, emotional, and personality problems. There are students in your class who have worked with Harold Kay in the past.

29 Our nurse, Flora Scott, is indispensable. Not only is she skilled in the day to day first-aid techniques, but she assists many teachers in order to enrich the health instruction program.

30 The dental hygienist cleans and inspects the children's teeth and gives instruction in their proper care.

31 Our custodian is Mr. Steven Price. He supervises the cleaning and maintenance of the building for you. Early in the year he will adjust each child's seat.

32 Perhaps the most important all-around person in our school is our secretary Alice Flack. She will help you in more ways than you can imagine. Almost every beginning teacher has some need for her assistance.

33 Mr. Collura is the school supervisor. His main function is to work closely with the staff and with me in order to improve the teaching program. He gives beginning teachers special attention and will do all he can to make your first year successful.

34 Although you have not yet met the teachers at Longacre, you will find them to be a serious and dedicated group. Often they meet by grade levels to discuss common problems and ways in which they may assist each other.

35 Off the library you will find a room containing the teachers' professional library. Here they have collected books of all kinds to assist them in their teaching.

36 I almost neglected to mention our fine lunchroom staff which prepares the daily lunches for the children and teachers.

37 The children are fed cafteria style.

38 Since the lunch period is only 30 minutes, the majority of the children remain at school.

39 While teachers eat their lunch in the faculty room, a parent acts as lunchroom supervisor and helper.

40 When the school buses arrive at 2:10 P.M., our school day comes to an end for most children.

41 However, some boys and girls take part in after school sports----

42 ---or after school enrichment classes in science.

43 Some of our sixth grade boys stay after school to set up and deliver audio visual equipment for use in classes the next day.

44 In conclusion, I should like to say a word or two about our parents. You will find most of them take serious interest in the children and their school progress. They attend our school parent meetings and raise many excellent questions.

45 When you hold open house in your classroom this year, you will find an attentive and interested audience. In general, our parents are helpful and most cooperative.

46 I know this was a hasty description of our school. If at anytime you have questions or problems, please feel free to visit with me. Again, I welcome you to our staff and extend my best wishes for a rewarding career at Longacre School.

47 THE END

48 CREDIT TO IRS AT BROCKPORT

49 CREDIT TO USOE (1)

50 CREDIT TO USOE (2)

APPENDIX E

LIST OF EXPERIMENTAL PARTICIPANTS

LIST OF EXPERIMENTAL PARTICIPANTS

Group I (September 1966)

1. Mrs. Ruth E. Beehler
2. Prudi Burnett
3. Joyce Caccamise
4. Mrs. Gail Dasne
5. Marilyn DiPrima *
6. Ronald Feldstein
7. Anna Marie Fiorica
8. Margery J. Griffin
9. Ilse Guldenpfennig
10. Ivylene LaMartina
11. Raymond O'Dell
12. Mary Alice Ryan
13. Mrs. Jean E. McCubcheon
14. Richard Santelli
15. Thomas G. Slater
16. Mrs. Patricia P. Smith
17. Michael Telesca
18. June Vesa
19. Mrs. Virginia Welcher
20. Lydia Yarke

Group II (February 1967)

1. Gerald D. Balduf
2. Frank P. Balonek
3. Marcia Ann Betlem
4. Kathleen L. Burns
5. Diane Y. Draper
6. Gloria Halber
7. Suzanne Beth Hawkins
8. Evelyn (Neal) Kemp
9. Richard Bruce LeBeau
10. Gloria DeBevoise ("J" Donald) Mabie
11. Virginia (Thomas) Maher
12. Salvatore Massa
13. Elaine Ruth Royer
14. Linda L. Schuyler
15. Donald (Beverley) Sears
16. Vaughn L. Sheppard
17. Ronald L. Sodoma
18. Gary J. Stewart
19. Toni Whitten
20. Frank R. Zambito

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*Dropped student teaching because of illness.

APPENDIX F

STUDENT TEACHING EVALUATION REPORT

OFFICE OF STUDENT TEACHING
STATE UNIVERSITY COLLEGE
BROCKPORT, NEW YORK

STUDENT TEACHING EVALUATION REPORT

STUDENT TEACHER________________________ SCHOOL________________________

SUPERVISING TEACHER____________________ GRADE______ SUBJECT AREA______

COLLEGE SUPERVISOR_____________________ QUARTER: 1 2 3 4

Inclusive Dates________________________ This Report is Due____________

PROCEDURE: Please circle the appropriate numeral at the right of each item, using, as a standard, the quality of teaching that may reasonably be expected of a student teacher. You are welcome to add comments for any item. Excellent 5, Above Average 4, Average 3, Below Average 2, Unsatisfactory 1.

I. PERSONAL QUALITIES

1. Appearance (Appropriate for the classroom, well groomed) 5 4 3 2 1
2. Speech (Usage, enunciation, pronunciation) 5 4 3 2 1
3. Voice (Tone quality, modulation, flexibility, projection) 5 4 3 2 1
4. Vitality (Mental and Physical) (Energy, endurance, vigor, alertness) 5 4 3 2 1
5. Desire to Achieve (Conscientious, willing to work, interested in teaching children, professionally minded) 5 4 3 2 1
6. Personality - Social Adaptability (Poised, congenial, courteous, sense of humor, optimistic) 5 4 3 2 1
7. Reliability (Does work on time; sees what needs to be done; assumes voluntary and assigned responsibilities) 5 4 3 2 1

8. Cooperation (Dependable, open minded, mature in action, profits by suggestions and criticisms) 5 4 3 2 1

II. INSTRUCTIONAL SKILLS

1. Grasp of Subject Matter (Accurate, significant and appropriate knowledge, varied interests, well informed) 5 4 3 2 1

2. Planning (Daily, Weekly, Unit) (Promptness, completeness, comprehensiveness, appropriateness and utilization) 5 4 3 2 1

3. Methods and Techniques (Resourceful, effective, creative--good use of materials and aids)

4. Motivation and Summary (Realistic, interesting creative) 5 4 3 2 1

5. Questioning (Pertinent, thought-provoking, well phrased) 5 4 3 2 1

6. Evaluation of Material Taught (Varied types of testing techniques, good format, proper directions, validity, analyzes own work objectively) 5 4 3 2 1

7. Pupil-Teacher Relationship
   (a. Develops cooperative personal relations; is conscious of classroom behavior; maintains positive discipline; is aware of pupil morale)
   (b. Recognizes needs of individual pupils; has sympathetic attitude towards pupils' problems) 5 4 3 2 1

8. Classroom Management (Effective organization of routines, efficient use of time, good housekeeping) 5 4 3 2 1

III. TEACHER POTENTIAL (Probable teaching success and professional growth) 5 4 3 2 1

IV. COMMENTS: (Please add a few statements giving additional information concerning strengths, weaknesses and recommendations that are pertinent to the evaluation of this student teacher.)

APPENDIX G

SEMANTIC DIFFERENTIALS

SEMANTIC DIFFERENTIALS (Adjective Scales)

The purpose of this test is to measure the meaning of certain concepts by having the concepts judged against a series of descriptive scales. The results of this test are to be used in a study of the nature of "meaning" and will NOT affect your grade.

Name:____
(Last) (First)

Sex:__________________(Male) ________________(Female)

At what school level are you preparing to teach? (check only one):

_________ Kindergarten
_________ Primary (1st through 3rd)
_________ Elementary (4th through 6th)
_________ Junior High (7th through 9th)
_________ Senior High School (10th through 12th)

DIRECTIONS FOR MAKING SCALES

On each page of the booklet you will find a different concept to be judged and beneath the concept a set of 16 rating scales. You are to rate the concept on each scale in order. Make your judgments on the basis of what these concepts mean to you. There are no right or wrong answers; all that is requested is your rating on each scale.

IMPORTANT

1. Place your check marks in the middle of the spaces, not on the boundaries. Not this ____X____: But this____ __X__
2. Never put more than one check mark on a single scale.
3. Be sure to check every scale for every concept.

Here is how you are to use the scales:

If you feel that the concept at the top of each page is very closely related to one end of a scale, you should place your check mark as follows:

fair_X_:___:___:___:___:___:___:___:___unfair
(or)
fair___:___:___:___:___:___:___:___:_X_unfair

If you feel that the concept is quite closely related to one or the other end of a scale (but not extremely), you should place your check mark as follows:

strong___:_X_:___:___:___:___:___:___:___weak
(or)
strong___:___:___:___:___:___:___:_X_:___weak

If the concept seems slightly related to one side as opposed to the other side, then place your check mark as follows:

active___:___:_X_:___:___:___:___:___:___passive
(or)
active___:___:___:___:___:___:_X_:___:___passive

If the concept seems only somewhat related to one side as opposed to the other side (but is not really neutral), then place your check mark as follows:

bright___:___:___:_X_:___:___:___:___:___dull
(or)
bright___:___:___:___:___:_X_:___:___:___dull

If you consider the concept to be neutral on the scale, or if the scale is completely irrelevant to the concept being judged, then place your check mark as follows:

safe___:___:___:___:_X_:___:___:___:___dangerous

PUPILS

strong___:___:___:___:___:___:___:___:___weak

active___:___:___:___:___:___:___:___:___passive

clear___:___:___:___:___:___:___:___:___vague

happy___:___:___:___:___:___:___:___:___sad

simple___:___:___:___:___:___:___:___:___complex

heavy___:___:___:___:___:___:___:___:___light

skillful___:___:___:___:___:___:___:___:___inept

good___:___:___:___:___:___:___:___:___bad

poised___:___:___:___:___:___:___:___:___excitable

chaotic___:___:___:___:___:___:___:___:___ordered

attractive___:___:___:___:___:___:___:___:___unattractive

dirty___:___:___:___:___:___:___:___:___clean

confident___:___:___:___:___:___:___:___:___uncertain

understanding___:___:___:___:___:___:___:___:___impatient

interesting___:___:___:___:___:___:___:___:___dull

formal___:___:___:___:___:___:___:___:___informal

MY FIRST YEAR OF TEACHING

heavy___:___:___:___:___:___:___:___:___light

clear___:___:___:___:___:___:___:___:___vague

happy___:___:___:___:___:___:___:___:___sad

confident___:___:___:___:___:___:___:___:___uncertain

simple___:___:___:___:___:___:___:___:___complex

understanding___:___:___:___:___:___:___:___:___impatient

dirty___:___:___:___:___:___:___:___:___clean

strong___:___:___:___:___:___:___:___:___weak

chaotic___:___:___:___:___:___:___:___:___ordered

active___:___:___:___:___:___:___:___:___passive

attractive___:___:___:___:___:___:___:___:___unattractive

poised___:___:___:___:___:___:___:___:___excitable

interesting___:___:___:___:___:___:___:___:___dull

skillful___:___:___:___:___:___:___:___:___inept

formal___:___:___:___:___:___:___:___:___informal

good___:___:___:___:___:___:___:___:___bad

STUDENT TEACHING

interesting___:___:___:___:___:___:___:___:___dull

strong___:___:___:___:___:___:___:___:___weak

skillful___:___:___:___:___:___:___:___:___inept

formal___:___:___:___:___:___:___:___:___informal

simple___:___:___:___:___:___:___:___:___complex

happy___:___:___:___:___:___:___:___:___sad

clear___:___:___:___:___:___:___:___:___vague

good___:___:___:___:___:___:___:___:___bad

active___:___:___:___:___:___:___:___:___passive

attractive___:___:___:___:___:___:___:___:___unattractive

heavy___:___:___:___:___:___:___:___:___light

chaotic___:___:___:___:___:___:___:___:___ordered

poised___:___:___:___:___:___:___:___:___excitable

dirty___:___:___:___:___:___:___:___:___clean

confident___:___:___:___:___:___:___:___:___uncertain

understanding___:___:___:___:___:___:___:___:___impatient

DISCIPLINE PROBLEMS

understanding___:___:___:___:___:___:___:___:___impatient

skillful___:___:___:___:___:___:___:___:___inept

chaotic___:___:___:___:___:___:___:___:___ordered

dirty___:___:___:___:___:___:___:___:___clean

poised___:___:___:___:___:___:___:___:___excitable

confident___:___:___:___:___:___:___:___:___uncertain

interesting___:___:___:___:___:___:___:___:___dull

heavy___:___:___:___:___:___:___:___:___light

formal___:___:___:___:___:___:___:___:___informal

good___:___:___:___:___:___:___:___:___bad

active___:___:___:___:___:___:___:___:___passive

strong___:___:___:___:___:___:___:___:___weak

simple___:___:___:___:___:___:___:___:___complex

clear___:___:___:___:___:___:___:___:___vague

happy___:___:___:___:___:___:___:___:___sad

attractive___:___:___:___:___:___:___:___:___unattractive

RELATIONSHIP WITH PARENTS

poised___:___:___:___:___:___:___:___:___excitable

confident___:___:___:___:___:___:___:___:___uncertain

attractive___:___:___:___:___:___:___:___:___unattractive

simple___:___:___:___:___:___:___:___:___complex

good___:___:___:___:___:___:___:___:___bad

strong___:___:___:___:___:___:___:___:___weak

formal___:___:___:___:___:___:___:___:___informal

clear___:___:___:___:___:___:___:___:___vague

skillful___:___:___:___:___:___:___:___:___inept

interesting___:___:___:___:___:___:___:___:___dull

understanding___:___:___:___:___:___:___:___:___impatient

dirty___:___:___:___:___:___:___:___:___clean

heavy___:___:___:___:___:___:___:___:___light

happy___:___:___:___:___:___:___:___:___sad

active___:___:___:___:___:___:___:___:___passive

chaotic___:___:___:___:___:___:___:___:___ordered

SUPERVISOR'S VISIT

clear___:___:___:___:___:___:___:___:___vague

confident___:___:___:___:___:___:___:___:___uncertain

understanding___:___:___:___:___:___:___:___:___impatient

simple___:___:___:___:___:___:___:___:___complex

dirty___:___:___:___:___:___:___:___:___clean

heavy___:___:___:___:___:___:___:___:___light

interesting___:___:___:___:___:___:___:___:___dull

happy___:___:___:___:___:___:___:___:___sad

formal___:___:___:___:___:___:___:___:___informal

attractive___:___:___:___:___:___:___:___:___unattractive

skillful___:___:___:___:___:___:___:___:___inept

chaotic___:___:___:___:___:___:___:___:___ordered

poised___:___:___:___:___:___:___:___:___excitable

strong___:___:___:___:___:___:___:___:___weak

good___:___:___:___:___:___:___:___:___bad

active___:___:___:___:___:___:___:___:___passive

METHODS OF TEACHING

active___:___:___:___:___:___:___:___:___passive

poised___:___:___:___:___:___:___:___:___excitable

skillful___:___:___:___:___:___:___:___:___inept

good___:___:___:___:___:___:___:___:___bad

chaotic___:___:___:___:___:___:___:___:___ordered

formal___:___:___:___:___:___:___:___:___informal

attractive___:___:___:___:___:___:___:___:___unattractive

strong___:___:___:___:___:___:___:___:___weak

confident___:___:___:___:___:___:___:___:___uncertain

dirty___:___:___:___:___:___:___:___:___clean

happy___:___:___:___:___:___:___:___:___sad

understanding___:___:___:___:___:___:___:___:___impatient

interesting___:___:___:___:___:___:___:___:___dull

clean___:___:___:___:___:___:___:___:___vague

simple___:___:___:___:___:___:___:___:___complex

heavy___:___:___:___:___:___:___:___:___light

SUPERVISING TEACHER

heavy___:___:___:___:___:___:___:___:___light

attractive___:___:___:___:___:___:___:___:___unattractive

clear___:___:___:___:___:___:___:___:___vague

formal___:___:___:___:___:___:___:___:___informal

interesting___:___:___:___:___:___:___:___:___dull

chaotic___:___:___:___:___:___:___:___:___ordered

understanding___:___:___:___:___:___:___:___:___impatient

good___:___:___:___:___:___:___:___:___bad

happy___:___:___:___:___:___:___:___:___sad

skillful___:___:___:___:___:___:___:___:___inept

dirty___:___:___:___:___:___:___:___:___clean

poised___:___:___:___:___:___:___:___:___excitable

confident___:___:___:___:___:___:___:___:___uncertain

active___:___:___:___:___:___:___:___:___passive

simple___:___:___:___:___:___:___:___:___complex

strong___:___:___:___:___:___:___:___:___weak

TEACHER

clear___:___:___:___:___:___:___:___:___vague

confident___:___:___:___:___:___:___:___:___uncertain

simple___:___:___:___:___:___:___:___:___complex

understanding___:___:___:___:___:___:___:___:___impatient

happy___:___:___:___:___:___:___:___:___sad

dirty___:___:___:___:___:___:___:___:___clean

heavy___:___:___:___:___:___:___:___:___light

chaotic___:___:___:___:___:___:___:___:___ordered

attractive___:___:___:___:___:___:___:___:___unattractive

active___:___:___:___:___:___:___:___:___passive

poised___:___:___:___:___:___:___:___:___excitable

skillful___:___:___:___:___:___:___:___:___inept

good___:___:___:___:___:___:___:___:___bad

formal___:___:___:___:___:___:___:___:___informal

interesting___:___:___:___:___:___:___:___:___dull

strong___:___:___:___:___:___:___:___:___weak

4

CLASSROOM BOOKKEEPING

strong___:___:___:___:___:___:___:___:___weak

good___:___:___:___:___:___:___:___:___bad

poised___:___:___:___:___:___:___:___:___excitable

active___:___:___:___:___:___:___:___:___passive

skillful___:___:___:___:___:___:___:___:___inept

formal___:___:___:___:___:___:___:___:___informal

attractive___:___:___:___:___:___:___:___:___unattractive

interesting___:___:___:___:___:___:___:___:___dull

chaotic___:___:___:___:___:___:___:___:___ordered

heavy___:___:___:___:___:___:___:___:___light

happy___:___:___:___:___:___:___:___:___sad

simple___:___:___:___:___:___:___:___:___complex

confident___:___:___:___:___:___:___:___:___uncertain

clear___:___:___:___:___:___:___:___:___vague

understanding___:___:___:___:___:___:___:___:___impatient

dirty___:___:___:___:___:___:___:___:___clean

PAT TAYLOR

attractive___:___:___:___:___:___:___:___:___unattractive

understanding___:___:___:___:___:___:___:___:___impatient

good___:___:___:___:___:___:___:___:___bad

simple___:___:___:___:___:___:___:___:___complex

active___:___:___:___:___:___:___:___:___passive

formal___:___:___:___:___:___:___:___:___informal

confident___:___:___:___:___:___:___:___:___uncertain

chaotic___:___:___:___:___:___:___:___:___ordered

skillful___:___:___:___:___:___:___:___:___inept

happy___:___:___:___:___:___:___:___:___sad

strong___:___:___:___:___:___:___:___:___weak

interesting___:___:___:___:___:___:___:___:___dull

dirty___:___:___:___:___:___:___:___:___clean

poised___:___:___:___:___:___:___:___:___excitable

heavy___:___:___:___:___:___:___:___:___light

clear___:___:___:___:___:___:___:___:___vague

MYSELF AS A TEACHER

attractive___:___:___:___:___:___:___:___unattractive

chaotic___:___:___:___:___:___:___:___ordered

heavy___:___:___:___:___:___:___:___light

interesting___:___:___:___:___:___:___:___dull

formal___:___:___:___:___:___:___:___informal

simple___:___:___:___:___:___:___:___complex

poised___:___:___:___:___:___:___:___excitable

happy___:___:___:___:___:___:___:___sad

understanding___:___:___:___:___:___:___:___impatient

clear___:___:___:___:___:___:___:___vague

good___:___:___:___:___:___:___:___bad

confident___:___:___:___:___:___:___:___uncertain

active___:___:___:___:___:___:___:___passive

dirty___:___:___:___:___:___:___:___clean

skillful___:___:___:___:___:___:___:___inept

strong___:___:___:___:___:___:___:___weak

APPENDIX H

CONFIDENCE SCALE

Name:______________________________

Date:______________________________

CONFIDENCE SCALE

Directions: The following items concern your feelings of confidence on your abilities as a classroom teacher. Please place an X before the word or words that best describes how you feel about each statement. Be sure to check all thirty-two statements.

1. I am confident that I can reach parents I wish to contact.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Uncertain

2. I am confident that I can introduce a new topic and obtain high interest.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

3. I am confident that I can help students with destructive home situations.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

4. I am confident that I can handle children's aggressive behavior toward one another.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

5. I am confident that I can be enthusiastic about each subject that I will teach.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

6. I am confident that I will not feel uncomfortable about giving failing grades.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

7. I am confident that I can help students see the relationships between undesirable behavior and its consequences.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

8. I am confident that I can cope with students who are not willing to work.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

9. I am confident that I can interpret children's capabilities to parents.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

10. I am confident that I know how to discuss a child's achievement with his parent (s).

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

11. I am confident that I can differentiate instruction among the slow, average, and gifted children in class.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

12. I am confident that I can help children with reading problems.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

13. I am confident that I can be happy with routine classroom bookkeeping.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

14. I am confident that I can involve pupils in self-evaluation.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

15. I am confident that I can integrate the isolated, disliked child into classroom activities.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

16. I am confident that I will have a positive attitude toward grading papers.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

17. I am confident that I can evaluate my objectives.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

18. I am confident that I have the skills necessary to have children maintain quiet while working independently.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

19. I am confident that I can have work for some while I work with other groups or individuals.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

20. I am confident that I will be at ease when supervised.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

21. I am confident that I will be patient with my students.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

22. I am confident that I know how to judge children's progress in terms of my aims and purposes.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

23. I am confident that I can cope with the constantly disrupting child.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

24. I am confident that I know what to do with students who finish early.

______________ Very Confident

______________ Confident

______________ Uncertain

______________ Very Uncertain

25. I am confident that I can involve many children in group discussions.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

26. I am confident that I can find reading materials for readers one or two years below grade level.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

27. I am confident that I can prepare classroom tests that are valid.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

28. I am confident that I can relate subjects meaningfully to children.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

29. I am confident that I can relate to parents that their children have problems.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

30. I am confident that I can select instructional materials.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

31. I am confident that I can interest parents in their children's behavior.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

32. I am confident that I can get students to do homework.

_______________ Very Confident

_______________ Confident

_______________ Uncertain

_______________ Very Uncertain

APPENDIX I

REACTIONS TO SIMULATOR TRAINING

REACTIONS TO SIMULATOR TRAINING

This instrument is an attempt to determine your attitude toward your classroom simulator experience. Feel free to express your feelings toward the experience.

I. Please read the following statements about the classroom simulator and state your feelings about each statement by checking (√) each statement below that expresses your sentiment.

1. I enjoyed receiving training in the classroom simulator.

______ a. Very much so

______ b. Somewhat

______ c. Not particularly

______ d. Not at all

2. The classroom simulator was realistic--"life-like."

______ a. Very realistic

______ b. Realistic

______ c. Not particularly realistic

______ d. Not realistic at all

3. I felt as though I was involved in the situation.

______ a. Very involved

______ b. Involved

______ c. Not particularly involved

______ d. Not involved at all

4. The discussions were valuable in developing my own concepts.

_______ a. Very valuable

_______ b. Valuable

_______ c. Not particularly valuable

_______ d. Not valuable at all

5. I believe that the simulator experience was meaningful in its relation to real classroom problems.

_______ a. Very meaning

_______ b. Meaningful

_______ c. Not particularly meaningful

_______ d. Not meaningful at all

6. I feel that my experience in the classroom simulator will help me identify classroom problems.

_______ a. Very Helpful

_______ b. Helpful

_______ c. Not particularly helpful

_______ d. Not helpful at all

7. I believe that my experience in the classroom simulator has helped me develop methods of coping with classroom problems.

_______ a. Very helpful

_______ b. Helpful

_______ c. Not particularly helpful

_______ d. Not helpful at all

8. The classroom simulator made the material more meaningful than if it had been presented in lectures.

_______ a. Much more meaningful

_______ b. More meaningful

_______ c. Less meaningful

_______ d. Much less meaningful

9. I believe that the classroom simulator experience should be provided on an individual basis.

_______ a. Strongly agree

_______ b. Agree

_______ c. Disagree

_______ d. Strongly disagree

10. I believe that the classroom simulator experience should be provided to smaller groups (up to six students).

_______ a. Strongly agree

_______ b. Agree

_______ c. Disagree

_______ d. Strongly disagree

11. I believe the classroom simulator experience could be provided to an entire class (40 to 60 students) just as effectively.

_______ a. Strongly agree

_______ b. Agree

_______ c. Disagree

_______ d. Strongly disagree

12. I would recommend classroom simulator experience to my friends.

_______ a. Strongly recommend

_______ b. Recommend

_______ c. Advise against

_______ d. Strongly advise against

13. I believe the classroom simulator experience was as valuable as the first two weeks of student teaching.

_______ a. More valuable

_______ b. Of equal value

_______ c. Somewhat less valuable

_______ d. Not valuable at all

II. Please write a brief paragraph about how you feel concerning your simulator experience. If more space is needed, use reverse side of page.

III. Please write a brief paragraph about how you feel the classroom simulator might be improved.

APPENDIX J

PERCEIVED EFFECTS OF SIMULATION TRAINING QUESTIONNAIRE

PERCEIVED EFFECTS OF SIMULATION TRAINING
QUESTIONNAIRE

Name:________________________________ Date:__________________________

Directions: Please answer the questions below in such a way that you evaluate your simulation training in respect to what lasting effects it had upon you and not in respect to how much you enjoyed it, were inconvenienced by it, or other such criteria concerned with emotional reactions to the experience. Expand upon your answer if you believe it will aid either in evaluating simulation training or can give further insight into how this training has an effect or fails to have an effect on your ability as a teacher.

1. How valuable was your simulation experience to you during student teaching?

2. How would you compare the relative values of student teaching and the simulation experience?

3. How valuable do you consider your simulation experience as a contribution toward making your first year of teaching successful?

4. **How does the value of the simulation training compare to other experiences you had in the Brockport teacher education curriculum?**

5. **Please comment on the placement, conduct and content of the simulation training in the light of your increased experience.**

6. **Did simulation training make a difference in your student teaching?**

No__________ Yes_________

Please explain:

TABLE XIX

RESPONSES TO THE PERCEIVED EFFECTS OF SIMULATION TRAINING QUESTIONNAIRE

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1. How valuable was your simulation experience to you during student teaching?

Simulator I

a. Uncertain if beneficial. Did give me more confident feeling.
b. Little effect. Couldn't identify with Pat Taylor.
c. Extremely valuable. Gave me self confidence; exposed me to alternative courses of action.
d. Better prepared me for a more realistic approach to student teaching.
e. Can't really say. More broadminded; realized many sides of the problem.
f. Worthwhile. It helped to solve many problems in student teaching.
g. I do not believe the simulation effectively helped me solve them. Helped me realize that problems weren't unique.
h. Confident feeling. Simulation is one step up the staircase of good teaching.
i. Developed more patience towards the active child.
j. Somewhat valuable. Introduced coming problems and solutions.
k. Moderately helpful. Developed insight into problems and how to deal with them.
l. Somewhat valuable. Received idea of what to expect.
m. Similar problems arose and recall of simulation helped.
n. Discipline problems have shown up; it was helpful in this respect.
o. Most valuable in regards to parent conferences, discipline and routine management.
p. Difficult to say.
q. It was valuable in that it was the first part of my college education that related directly to things I would have to do while teaching.

Simulator II

a. It was valuable to me especially in the elementary school because it gave me a confidence that I didn't have before the simulator.
b. Most of the situations that we had to cope with in the simulator were not present in my student teaching experiences. I had no field trips, no irate parents, etc. Therefore, the direct carry-over between the two was not very great.
c. I felt that my simulation experience was helpful during my student

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TABLE XIX (continued)

teaching, but I think that it will be very helpful to me during my first year of teaching.

d. I felt more sure of myself when I went student teaching. I also realized the value of the curriculum guide, and other books I received when student teaching.

e. It gave me a lot of confidence for my first student teaching assignment. It acquainted me with some of the materials (cumulative records, etc.) that I might be using.

f. It was valuable in that after I had done something the wrong way, I could always think back to what we had discussed during the project. At the time, I was involved in the incident, I did not stop to think about what the "books" tell you to do.

g. The simulation program made me conscious of the many problems that could confront a beginning teacher. It gave me an insight into the many and varied experiences that a teacher faces during a school year.

h. I think it helped me in student teaching by giving me a different outlook on the problems we studied as it actually came up. I was more understanding.

i. It helped in that when situations, which were discussed in the group, arose during student teaching I immediately thought of various approaches or other ways of thinking. I felt more informed when discussing problems with my co-op teacher.

j. I was not consciously aware of its being a great help to me; that is I never had a problem in student teaching when I could look back to the simulation experience and find an answer. Perhaps it was more help to me in a general way than I realized.

k. I didn't feel that the simulation project helped me very much.

l. I had much more confidence in approaching handling of disciplinary problems that arose since having had the chance to discuss with others different courses of action, and by having to actually think about what my courses of action would be.

m. I feel that my simulation experience was valuable due to the direction which it provided for me in a lateral scope in the field of education.

n. I found myself thinking about how some of the other kids might have handled certain problems.

o. The simulation experience gave me a lot of confidence for student teaching that I would not have had.

p. I felt it was very valuable in preparing me for student teaching.

q. I knew where to look to find answers to problems, cumulative records, etc. I realized that other people had the same problems that I faced.

r. Not very valuable during student teaching.

s. It was valuable in the way that it provided the experience of discovering what others would do in certain situations.

TABLE XIX (continued)

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2. How would you compare the relative values of student teaching and the simulation experience?

Simulator I

a. Student teaching more valuable. Simulation provided valuable insight into problems and approaches for solutions. Student teaching provided valuable practical experience. Simulation in an undetermined quality; real problems faced only in own classroom.
b. Not closely related. Simulation, one picture. Student teaching, different.
c. Student teaching more valuable. Simulation good preparation for student teaching.
d. Student teaching actual, real experience, most valuable. Simulation is valuable, should be mandatory before student teaching.
e. Together student teaching and simulation gave me more confidence for next year.
f. There was quite a lot of difference between simulation and actual teaching.
g. Practical experience of student teaching is more valuable than the theoretical solving in simulation.
h. Student teaching is far more valuable. Simulation cannot equal student teaching.
i. Simulation helped noticeably. It should be lengthened.
j. Student teaching is very valuable, real situation.
k. Student teaching is absolutely necessary; much more so than simulation. Simulation provides good insight. Both are good testing grounds.
l. Both are valuable.
m. Simulation is preventive medicine.
n. At times simulation was more beneficial. Criticism from peers was helpful. Student teaching provided only limited experience in actually solving problems.
o. Both were good. Simulation should be longer. Student teaching could be cut a bit. "Real" students proved to be more human.
p. No basis for comparison. There is no substitute for actual experience. Simulation might enable student teaching to be cut.
q. Simulation is as close as one can get without being involved.

Simulator II

a. The values of student teaching relative to the encountering and solving of problems greatly outweighed those encountered in the simulation experience which would be evident.

TABLE XIX (continued)

b. I found that many experiences I had in student teaching were simular to experiences in the simulator.

c. I think that the actual student teaching experience is much more valuable because you are dealing with live people and you can't pretend that they will behave the way that you want them to. Real students often react to a given situation in a manner totally different to the way you would have wanted or expected.

d. I feel that the simulation experience was very valuable, but yet student teaching more valuable. I am glad that I took part in the simulator but feel that the time needed for it should not have been taken away from my student teaching first quarter.

e. On the whole, I feel that the simulation helped me to realize what to expect while student teaching. Something, for example, parent conferences I wasn't as involved in as I would be as a first year teacher. Therefore, I feel the experience will have much more value not just in student teaching.

f. Some of the incidents in the simulation experience were not as realistic when in front of a classroom. Some of the incidents were the extremes of cases which in student teaching (in the real class situation) never happened. In student teaching, you don't have time to analyze the different courses of action you'd take if and when the situations arose as in the simulation you have the time to think over what might be the best possible course of action. In student teaching, you are dealing with the students directly and have contact; however, in the simulation, you're working with children on tapes and on films which gives you no contact and makes the situation one-sided and impersonal. I feel that the simulation project would be more valuable if the cases and situations were more realistic.

g. I think student teaching was far more valuable to me; only once in student teaching did I ever meet a problem exactly like the ones we had during the simulation project.

h. The simulation program gives a more inclusive experience to the student teacher as I don't think any student teaching situation would have all the varied experiences that were thrown at us during the simulation. The only thing the simulation lacked was actual classroom experience.

i. The simulator was good but you need the actual experience to test your opinions and techniques. It narrowed the gap between theory and the actual classroom behavior. It gave a warning.

j. I do not feel that there is a substitute for student teaching presently; value-wise, the simulation experience does not hold a candle to student teaching. It was a great transitional period from classroom to student teaching. It gave us many things to watch for in student teaching thus making student teaching even more valuable.

TABLE XIX (continued)

k. I think student teaching is a much more valuable experience. The number of problems presented in the simulator was, of necessity, limited. Also, the simulation of an experience is never quite the same as the experience itself. Of course, the simulator did have the advantages of creating the opportunity of discussing solutions to a problem, but even then the problems weren't generally "solved."

l. I feel that student teaching is more valuable because it is a real situation.

m. They both had great values. Student teaching gave the opportunity for trying out procedures discussed in the simulation experience. The student teaching, with actual class procedures, seemed more concrete and realistic.

n. In evaluating relative values of student teaching and my simulation experience, I would say that a strong correlation exists in the practical and realistic situations which I met.

o. They are not comparable. One is actual experience and the other hypothetical. Both are needed to help you understand problems you meet.

p. I feel that they were both a great deal of help in making me a better teacher.

q. I feel that the simulation project gave me an insight into teaching. The simulation project gave me a chance to collect my knowledge and put it to practical knowledge before I entered the classroom.

r. The simulator gave you ideas! And background. In student teaching you could try these ideas and concepts and see what really worked best for you.

s. I think both experiences will help you with your first year of teaching.

3. How valuable do you consider simulation as a contribution toward making your first year of teaching successful?

Simulator I

a. More valuable than in student teaching. In student teaching students were influenced by the teacher. Routines and procedures have been established. Problems which were discussed in simulation will have more meaning when the student can become a teacher in her own classroom.

b. Simulation experiences should have been more realistic and more on major problems. However, it should contribute to making more successful teachers.

c. It is valuable and will definitely help me in my first year.

TABLE XIX (continued)

This simulation experience exposed me to problems and has given me many solutions or alternatives.

d. Can't say without the experience.
e. Can't answer definitely. Simulation was worthwhile toward teaching and life. It will be more beneficial in my classroom.
f. Simulation will be extremely helpful. It provided background for solving problems.
g. The awareness of potential problems will be valuable. I believe that the simulation of a teaching experience has more application to a first-year teaching experience than to student teaching.
h. Simulation is just one step. Its greatest value was instilling positive attitudes of ideas and searching for an answer.
i. It made me confident that I will be able to handle first year problems.
j. Difficult to say, but am more aware of problems.
k. Moderately. It helped me to learn skills such as parent-teacher conferences, getting and using materials. It helped me to develop ideas, convictions, and a philosophy.
l. I consider the simulation experience valuable. It makes a new teacher aware of problems. It helps you to meet problems with success and gives a feeling of self-confidence.
m. Simulation was a tremendous opportunity. It will be valuable toward making my first year successful.
n. A valuable, worthwhile experience in handling discipline, parent conferences, and reading groups.
o. Became aware of many problems which I might be faced with. Can cope with them better because I have discussed them; I know some methods which might receive good results.
p. I imagine it helped; simulation problems were met in student teaching. I thought more about solutions.
q. Most valuable--the most important perhaps learning not to take the attitudes, etc. of the students personally. It will serve as great moral support.

Simulator II

a. I think that it will help me a great deal towards problems in my first year experiences.
b. Again, I say that the opportunity to discover what others would do in a certain situation has its lasting effects upon me.
c. Insofar as I intend to teach on the junior high level in math, I do not expect to run into a great deal of difficulty with field trips, grouping or collecting milk money. But I might conceivably run into some of the other situations.
d. I feel that the simulator project gave me a chance to face many of the problems I'll meet in my first year. I feel that the

TABLE XIX (continued)

project gave me confidence in handling these problems and to others that might arise.

e. It helped me realize the value of many types of literature first year teachers receive. It gave me confidence in applying for a job and talking intelligently to the interviewer. I also think it will help me to solve many problems that first year teachers have.

f. If student teaching were eliminated and first year teaching experience coming directly after simulation, I feel simulation is more valuable (confidence, acquaintance with materials and techniques for specific situations--parent conferences) than it is with student teaching as the intermediate step. It does help one to analyze and evaluate situations more orderly, organized and effectively. It makes one aware of some possible problems to be faced. Simulation also contributes to cooperation among people--a carry-over for cooperation with faculty and other school personnel.

g. I think that it will undoubtedly be of some value; how much at this time I don't know, but those two weeks were by no means wasted.

h. Now that I have completed student teaching, I feel the simulation program was very valuable. It really gave me a better understanding of how a school system operates, and the many problems and experiences of a beginning teacher than did my student teaching experience where I was involved with just my "teacher" and the class. The teacher was a buffer that we didn't have in the simulation program where we were the teacher.

i. I believe it will be much more practical next year than it was in student teaching. I learned or acquired many theories to apply in these different instances. I honestly feel I will benefit from the simulator just by the outlook I have on these problem areas.

j. Presently this is difficult to measure because I don't know how successful I would be without it. I think my student teaching experience will be the greatest contribution to any success I have as a teacher.

k. It's very difficult to answer a question which calls for a projection of that type. I hope it will be valuable. There are, however, a great many problems which connot be answered by a simulation of any experience. There are not only many problems, but many variations of one problem.

l. Simulation did help me in finding permanent records forms. I know what to look for in these records.

m. The simulation experience was very valuable in preparing me for problems which may arise. I feel now that I have a more definite idea of the courses of action I would take in many possible arising situations and much more confidence towards taking such actions.

TABLE XIX (continued)

n. As a contribution toward making my first year of teaching successful, I feel that my simulation experience has presented the basic and numerous situations which will arise and, also, some realistic solutions.
o. I will not look at a problem from one point of view but from twenty or more.
p. I think it was very valuable because it defined many problems that I would not have been aware of otherwise. It gave me many ideas as to solving these problems, also.
q. I feel the simulation project was very valuable in helping me prepare for my first year by presenting the problems of a teacher that I did not realize even were there.
r. Just that I have many different ideas on how to handle different situations.
s. Very valuable.

4. How does the value of the simulation training compare to other experiences you had in the Brockport teacher education curriculum?

Simulator I

a. It was more valuable than the sum total of education courses because it was the practical application of the theoretical and factual material. It was a chance to participate. Simulation made problems to be faced in student teaching more vivid and realistic. The exchange of ideas and probable solutions was most beneficial and valuable.
b. Student teaching was by far the more valuable.
c. Simulation was more valuable. It was practical and directly related to teaching.
d. Simulation was more beneficial than all the education courses, except the teaching of reading.
e. On equal basis. What we didn't get in education courses (actual problems, cumulative records, various viewpoints) we got in simulation.
f. Worth more than most of the education courses. It should be put into the actual curriculum.
g. Simulation produced a greater degree of involvement. It provided opportunity to test my ideas and opinions. It gave me greater insight into teaching than any other experience. Simulation served to draw together information gathered from other courses. Student teaching is still more valuable.
h. About the same value as other education courses. Covered material which had not been covered in other education courses, therefore simulation is unique in itself.

TABLE XIX (continued)

i. Not as beneficial as other courses because no physical contact with children was involved.
j. Simulation is far more valuable than some education courses.
k. Simulation comes next to student teaching. Education courses tend to be idealistic, simulation realistic.
l. Simulation is more valuable because of actual experiences, rather than learning "theory"
m. The actual association with classroom problems were more valuable than a lecture or discussion.
n. Simulation was of greater help than any other education course taken.
o. It was a summary of four years of teacher training in two weeks. One could finally try methods learned without losing or experimenting on a real class.
p. Should be required for all because I received more valuable training for my profession in two weeks than any education course has given.
q. "Bravo - for Simulation." For once an actual feeling out of what it is to be a teacher rather than having stories and reading a book.

Simulator II

a. I think it compares as favorably or better than most of the courses I had in 4 years of college.
b. I believe it was much more valuable than most of my education courses.
c. The simulator was much more valuable than most of the teacher education courses which dealt mainly with theory. It is really amazing how much theory must be modified in order to have any relationship with practical application. All you learn in education courses are the "don'ts." Don't embarrass a child, don't punish the whole class, etc., but they never replace these with any better ideas. In the simulator, we dealt with real situations not simply theory.
d. I feel that this project was more valuable than any of my previous teacher preparation courses. I think that instead of taking time off our student teaching, that a course should be set up and have it mandatory for all. I felt it was very worthwhile and I am glad I was asked to be in it. The only problem I didn't like was the fact that I had to wait until my senior year to student teach, and this made it very hard to get a job for September.
e. I wish this type of training was offered to every student in the form of a required course. To me it was far better than some of the required courses I took.

TABLE XIX (continued)

f. I believe it had more value than some education courses (it brought us closer to the school situation contrary to textbook idealism in handling situations) and yet I feel student teaching was more realistic than the simulation because we were dealing directly with the students and in actual situations. Student teaching was longer and thus enabled us to picture and handle more situations than the simulator. I feel it helped in making us organize and be prepared better than other education courses. It also gave us a good taste of what hours a school day would consist of (7-8 hours/day) instead of 3 hours/week of classes.

g. It was definitely of more value than any education course I ever had at Brockport.

h. I think it is tops in actual instruction as to what a beginning teacher really faces during the first year. Some of the education courses seem to skim over the surface of the business of teaching students to become good teachers and I feel the simulation program really got down to business and let us know what we could expect as first year teachers. The discussions in simulation gave me some information that I can use when I'm a beginning teacher that I feel will be tried and tested and not just some idea that came out of a textbook.

i. It was much more practical and useful. Perhaps it was the method and materials because I don't feel I would have surveyed a Methods Class in that situation for two weeks. It was much better than participation in the Campus School where you are treated like an alien by students and some teachers. In participation your ideas and beliefs are disregarded. You sit in a class with no teacher as soon as you enter and leaves a student teacher to evaluate you and give you a grade. This is useless.

j. I think the two-week simulation experience was better in preparing a person for teaching than any course of study. However, my other courses of study helped make experiences in the simulation course more meaningful.

k. The simulation training was much better than any of the other education courses. It seems to me that it would be a good idea perhaps to substitute the simulator for one of the education courses (for example, Foundations of Education; which didn't seem to have a great deal of content) instead of using two weeks of student teaching time for it. I feel strongly that the time allowed for student teaching should not be cut into. There is no substitute for actual experience.

l. I felt that Brockport professors prepare a teacher for teaching. Dr. _________ does a wonderful job of preparing teachers. He tells his students what to expect.

m. Definitely the best. I feel that the simulation training allowed for more student thinking, deciding on courses of actions, was more

TABLE XIX (continued)

closely related to teaching actual experiences and was concerned with topics most closely related to preparation for teaching.

n. Other experiences in my education curriculum have provided a strong theoretical background for a profession in education. Simulation was able to place these ideas into a practical and workable picture. This program also proved that a great deal more can be worked into sophomore participation.

o. It ranks high. There was really not enough discussion of problems in classrooms.

p. I feel it was much more valuable and practical than any education course I had taken.

q. I feel that the project brought all other materials into a meaningful experience. I learned the material but the simulation project drew all the material together and gave some very valuable experience. I don't feel that the curriculum can be eliminated. I feel that each does their own job.

r. I think it is a more lasting effect on me. I will remember issues from the simulator long after I have forgotten material from my education courses. You learn by doing--not watching.

s. More interesting because it was closer to the classroom and in a way you taught yourself.

5. Please comment on the placement, conduct, and content of the simulation in the light of your increased experience.

Simulator I

a. No answer.

b. It presented a more realistic way, rather than on paper or film.

c. Content was good. It was directly related to teaching experiences in general. The placement was good. Hours were too long.

d. Fine. No suggestions.

e. Indifference to everything except content. This was excellent, realistic, and useful.

f. Simulation seems to be a very important aspect of a first year teachers training.

g. I would prefer that it not cut into student teaching. The content was applicable in a teaching situation. The individual response situation could be conducted differently. Students should be separated.

h. Make it longer, not so intensive. It should be combined with practical experience.

i. The problems were beneficial. The conduct of the meetings was too rigid.

j. The placement was fine; organization was excellent and informal; and the content was good and realistic.

k. Simulation is a good experience before student teaching. The content could be varied. More attention given to preventive discipline and grading. The conduct of the simulation classes

TABLE XIX (continued)

could be greatly improved. It should be less painful--better facilities, shorter hours, and a more effective leader.

l. The simulation training added to my teaching experience. I am more open to suggestions.

m. The content was good--all types of problems were presented well. It was well conducted. The informal atmosphere created real interest and participation.

n. It was a long and tiring experience. Problems were repetitious. There were personality conflicts at times.

o. It was satisfactory as it was.

p. Simulation before experience was beneficial. Another simulation before graduation as a refresher would be helpful.

q. Don't understand question.

Simulator II

a. Most of it was very well planned, but catalogues and "what seems to be the problem" got boring.

b. The conduct and content of the training are commendable. The placement, however, should, as I experienced it, be as close to the completion of college as possible. Otherwise, I would think there would be no carry-over.

c. I think that the simulator was well-placed, but from my viewpoint, there was too much emphasis on irate parents. I would hope that I would not receive such a profusion of letters my first year.

d. I have nothing to say as far as the placement, conduct, and content. I was happy with all three of these conditions, and have nothing to say against them.

e. I feel that many problems were discussed in the two week training period. However, one suggestion, if this was to be done again, would like to have more problems related to discipline. I found this a reoccurring problem.

f. I feel it important for a student going out to student teach in building confidence and exposing one to what is expected and what materials you'd run across. I would like to see more realistic and practical situations used in this experience. Some experiences were far-fetched. I feel that an air of more seriousness might have produced more thinking on the students' part however, some humor and eight-sidedness was good in making us feel comfortable and at ease in the simulator experiment. I would have liked to have the "more experienced people" (Dr. Broadbent, Mr. Bubb, people from Tennessee) comment and analyze the students' decisions and evaluations, giving us an idea why and when these decisions might or might not be practical.

TABLE XIX (continued)

g. It was held at a poor time for those of us who were job hunting. It was extremely difficult to find a job because credentials were only partly complete. The problems were very appropriate--these are trouble spots--but they were too specific (the solutions didn't work in every case) and they tended to repeat themselves. The project was very well arranged and thought through. I consider myself fortunate to have been involved.

h. At the time of simulation I felt it was too long and repetitious. But now, since I have completed two quarters of student teaching, I think it was good. I originally felt that I needed those two weeks in the classroom, but now I feel that my last assignment was two weeks too long. I feel the two weeks at simulation were of much greater benefit to me as a teacher than equal time in a student teaching situation.

i. Conduct and content were both very good. Perhaps you could spread the two weeks out. During student teaching perhaps teach four days and come in for a simulator and let the student teachers each Friday bring in a different situation they actually faced and discuss this problem itself. It was hard for me to relate cures without actually experiencing the cause.

j. I would like to see one week of simulation before the first student teaching experience and one week before the second student teaching experience. The experiment was conducted well enough--informality was allowed to encourage freedom of expression.

k. The format of the simulator was, in general, good. The discussions were very inauthentic. I think it would have helped, however, if the participants could have felt that they were reaching some really valid conclusions. Many times we weren't sure whether we even were on the "right tract" or "far afield."

l. I didn't encounter any of the problems that we discussed in the simulation project.

m. The relaxed informal atmosphere allowed for greater discussions and development of ideas. The content was valuable, expecially the role playing and group discussions. The placement by random sampling seemed to produce students with many interesting ideas and comments.

n. Generally, my simulation training worked with depth in many facets of teaching. I feel that very good insight was provided in the areas of disciplinary action and parent conferences. I feel that a problem pertaining to the flexibility in the daily schedule of teaching would have been useful.

o. It might have been better to have a session before student teaching and one after. It would have been good to be able to talk about problems after you have had to face them.

p. No answer.

q. I felt the content was excellent in that many of the problems

TABLE XIX (continued)

in simulation, I faced in student teaching.

r. Maybe the simulator might have been more useful to me if it came one-half way through student teaching. After it met the problems for myself, I would have got more involved in the simulator.

s. Conduct was good because you were able to think it out logically.

6. Did simulation training make a difference in your student teaching?

Simulator I

a. No lasting effect. Some problems were blown up. Some were not effectively presented.

b. I was more confident. It made me more knowledgeable about pupil behavior and school operation.

c. Simulation eliminated an idealistic approach and prepared me for a more realistic approach and attitude.

d. No way to compare self without simulation approach. Simulation gave me many discipline techniques. It helped me develop realization that everyone has his own methods.

e. I believe it has since many of these situations occur throughout teaching.

f. The initial help that I received was the facility in using school resources and procedures. At the beginning of student teaching I had better insight as to the possible sources of help and information than I would have had without simulation.

g. I don't know. Reality called for quick decisions. The time spent on parent-teacher conferences cannot be evaluated yet.

h. I felt as though I had an edge on other student teachers because of the confidence I went into the school with.

i. It gave me insight into the kinds of problems to expect as a teacher. I have not needed to try them.

j. My first supervising teacher was very interested in the simulation program. She wanted to know if it were responsible for my success.

k. In my student teaching I actually saw the simulation problems walking around in front of me.

l. I went into my student teaching with more self-confidence than I otherwise would have. I had two successful student teaching assignments and I'm sure it was due in a small part to my experience in the simulation experience.

m. In the city I have tried several of the suggestions that were offered. I have run across emotional and disciplinary incidents I wish I could have taped. Many times I have wanted to call all the Pats together and have them work on a child in my class.

n. I was more confident in dealing with parents and did not mind having anyone watch me teach.

TABLE XIX (continued)

o. Simulation had an effect on my first assignment because it gave me much more confidence. The problems were not applicable on the pre-kindergarten and kindergarten assignment.
p. Cannot tell.
q. It gave me an orientation and personal experience to relate and lean on during student teaching.

Simulator II

a. Yes. I think that it definitely helped me in all aspects of my student teaching with confidence.
b. Yes. Confidence.
c. Yes. It prepared me for problems that I would meet even though many of them I did not encounter.
d. Yes. I felt that we met and discussed problems in the project which I had met during my student teaching. Through peer discussions in the project, I was presented with suggestions on how to handle problems, such as discipline, etc.
e. Yes. I feel that the simulation experience was of value to me. I felt more confident. As far as making a difference I had nothing previous to compare to. However, I don't know how anyone could have stayed in the group for two weeks and not gained helpful advice and suggestions for student teaching.
f. Yes. I believe it helped much more in my first teaching assignment in building up confidence in getting right into the teaching and classroom situation. After my first assignment, I already had the confidence which carried over from simulation and from my teaching experience, thus far. All the other values (cooperation, acquaintance with materials, confidence, etc.) had I not had the simulation experience, would have arisen during and throughout student teaching experience.
g. Yes. I think it made me more sensitive to the problems. I thought more about different approaches I could have used. It gets you thinking deeper than if you had not been exposed to the incidents.
h. Yes. I think after simulation my attitude toward student teaching had changed somewhat. I don't think I felt as inexperienced. I had more knowledge as to the problems my classroom teacher experienced. Perhaps all this information I gained at simulation made some aspects of student teaching seem very elementary and Monatonous (sic).
i. Yes. Because I had some different methods ready to apply when any of these problems came forth. I had a little warning of some important problems would or could arise and I applied my plan to prevent the problem , before it began.
j. Yes. Certain problems stood out (those we had discussions about). Decisions were easier to make.

TABLE XIX (continued)

k. (Undecided). I'm not sure what you mean by this question. The difference with regard to how valuable it was, I tried to answer in the first question. I might add that it did make a difference in my first student teaching assignment in that my sponsor teacher felt that in some areas she couldn't evaluate my teaching ability accurately because I hadn't been there long enough. She seemed rather disturbed that my time there was shortened by the two weeks in the simulator.

l. Yes. Only on the permanent records, and forms. I didn't feel that the simulation project was a real classroom situation.

m. Yes. The simulation training gave me many different variations to try out and evaluate during student teaching. It helped me gain more confidence in approaching and following through with procedures in student teaching.

n. Yes. I feel that my whole simulation experience was useful in student teaching. In the initial stages, it gave me direction in a strange school. When I took over the classroom, I was able to anticipate and solve situations which appeared to be in the making.

o. Yes. As I mentioned before, I was more open-minded. I was not able to really get involved in my first assignment. I was only there five weeks.

p. Yes. I think yes. But how can I really say because I don't know how I would have done without it. However, I do think things came much easier and I knew what to do and where to look.

q. Yes. It gave me much more confidence.

r. Yes. I felt more confident going into student teaching after dealing with them (problems) in the classroom rather than meeting them in the teaching situation.

s. No. I felt it helped me pick out the problems faster but was not able to stop them (mainly because it was student teaching).

APPENDIX K

SUPERVISING TEACHER WORKSHOP SCHEDULE

SUPERVISING TEACHER WORKSHOP
SIMULATION PROJECT
September 10, 1966

I. Purpose:

The purpose of this workshop is to acquaint Supervising Teachers with their role in the evaluation of the Simulation Project and to train these teachers in the use of the Classroom Observation Record.

II. Workshop

Schedule: Saturday, September 10, 1966

9:30	Welcome by Dr. Raye Conrad
9:40	Introduction to the Project by Dr. Donald Cruickshank
9:45	Design and Evaluation of the Project by Dr. Donald Cruickshank
10:10	Instrument Orientation by Dr. Frank Broadbent
11:00	COR Training Session #1
11:30	Coffee Break
11:45	COR Session #2
12:30	Lunch
1:30	Welcome by Mr. Donald Novelli
1:40	COR Training Session #2 (cont.)
2:15	COR Training Session #3
3:00	COR Reliability Test
3:30	Closing Remarks and Questions by Dr. Donald Cruickshank

III. Project

Schedule:

9-10 - Workshop
9-12 - Control Student Teacher arrival and first day of Simulation
23 - Last day of Simulator
26 - Simulator Student Teacher's arrival
11-10 - Last day of first quarter for student teaching
11-11 - Seminar for Student Teachers

IV. Materials:

1 - Assumption of full-time responsibility card
1 - Perceived Problems Inventory
1 - Teacher Rating Scale
1 - Classroom Observation Record
1 - COR (Salmon)
1 - COR (Pink)
1 - COR (White Index)
1 - Self-addressed Envelope

V. Evaluation

Schedule:

1. Classroom Observation Record
   Week of November 7th
2. Perceived Problems Inventory
   Week of November 7th
3. Assumption of full-time Responsibility Card
   After first week, student teacher assumes full responsibility, or is ready to do so. Please put these instruments in the self-addressed envelope and return them from Nov. 11-14.

APPENDIX L

ALTERNATE DAILY SCHEDULES

ALTERNATE DAILY SCHEDULES

Schedule for Days When "Take-Home Problems" Are Assigned

8:00 - 8:30	Planning or independent study
8:30 - 9:30	Discussion of "take-home problem"
9:30 - 9:45	BREAK
9:45 - 10:30	Problem presentation and problem solving
10:30 - 11:30	Problem discussion
11:30 - 12:30	LUNCH
12:30 - 1:15	Problem presentation and problem solving
1:15 - 2:15	Problem discussion
2:15 - 2:30	BREAK
2:30 - 3:15	Problem presentation and problem solving
3:15 - 4:15	Problem discussion
4:15 - 4:30	Presentation of "take-home problem"

Schedule for Days When No "Take-Home Problem" Has Been Assigned

8:00 - 8:30	Planning or independent study
8:30 - 9:15	Problem presentation and problem solving
9:15 - 10:15	Problem discussion
10:15 - 10:30	BREAK
10:30 - 11:15	Problem presentation and problem solving
11:15 - 12:15	Problem discussion
12:15 - 1:15	LUNCH
1:15 - 2:00	Problem presentation and problem solving
2:00 - 3:00	Problem discussion
3:00 - 3:15	BREAK
3:15 - 4:00	Problem presentation and problem solving
4:00 - 5:00	Problem discussion

APPENDIX M

GENERAL TWO WEEK SCHEDULE FOR SIMULATOR

General Two-Week Schedule

First Field Test

Plans for Simulator Program

September 9 Supervising Teachers Registration and pre-testing

10 Supervising Teachers Orientation

9:30 - 4:00 Math-Science Building

a) Purpose of project, hypotheses, etc.
b) Design of project
c) Role of supervising teachers in project
--instrument orientation
--attempt to develop inter-rater reliability

12 A.M. Orientation
Times 8:30 - 4:30
Physical setting (Campus School)
Relationship of simulator to ST program
Our role in simulator
Get acquainted technique
F. S.
Materials orientation
Study time

P.M. Study time
Discussion of materials
Problem #91

13 A.M. #12
#22/30

P.M. #35 assigned as take home problem

14 A.M. Discuss #35
#76

P.M. #11
#71
#34 assigned as take home problem

15 A.M. Discuss #34
#79

P.M. #108
18
# 3 assigned as take home problem

September 16	A.M.	Discuss #3 #7
	P.M.	#10 # 5 # 2 assigned as take home problem
19	A.M.	Discuss #2 #48
	P.M.	#39 #67
20	A.M.	#31 #90
	P.M.	#45 assigned as take home problem
21	A.M.	Discuss #45 #85
	P.M.	#42 #89 #75 assigned as take home problem
22	A.M.	Discuss #75 #38
	P.M.	#29 #117
23		Post-tests

Schedule for Simulator Program

Second Field Test

First Week

January 30	A.M.	8:30	Orientation
		9:00	Getting acquainted
		9:30	Meeting your situation
		11:30	Lunch
	P.M.	12:30	Study time
		2:30	Discussion of materials
		2:45	Break
		3:00	Problem #91 Film and problem solving
		3:45	Problem discussion
		4:30	Assignment: study materials
January 31	A.M.	8:30	Assign 35
		8:45	#12 Problem solving
		9:30	Problem discussion
		10:30	Break
		10:45	#22/30 Problem solving
		11:45	Problem discussion
	P.M.	12:45	Lunch
		1:45	#75 Problem solving and library research
		3:30	Problem discussion
		4:30	Assignment: #35 and materials
February 1	A.M.	8:30	#76 Film and problem solving
		9:15	Problem discussion. Role playing incidents
		10:30	Break
		10:45	#11 Problem solving
		11:30	Problem discussion
	P.M.	12:15	Lunch
		1:15	#71 Problem solving
		2:15	Problem discussion
		3:15	Break
		3:45	Evaluation period
		4:30	Assignment: #35, materials, and as discussed

February 2	A.M.	8:30	Assign 34
		8:45	Discuss #35 in small groups
		9:15	Problem discussion
		10:15	Break
		10:30	#79 Film and problem solving
		11:15	Problem discussion
	P.M.	12:15	Lunch
		1:15	#108 Problem solving
		2:00	Problem discussion
		2:45	Break
		3:00	#18 Film and problem solving
		3:45	Problem discussion
		4:30	Assignment: #34
February 3	A.M.	8:30	Discuss #34 in small groups
		9:00	Problem discussion
		10:00	Break
		10:15	#7 Problem solving
		11:15	Problem discussion
	P.M.	12:15	Lunch
		1:15	#10 Film and problem solving
		2:00	Problem discussion
		2:45	Break
		3:00	#5 Problem solving
		3:20	Role playing
		3:50	Problem discussion
		4:30	Assignment: Work sheets

Second Week

February 6	A.M.	8:30	Assign #3
		8:45	#48 Film and problem solving
		9:15	Problem discussion
		10:00	Break
		10:15	#39 Problem solving
		11:00	Problem discussion
		11:45	Lunch
	P.M.	12:45	#67
		1:05	Role playing
		1:45	Problem discussion
		2:45	Break
		3:00	#85 Film and problem solving
		3:45	Problem discussion
		4:30	Assignment: #3
February 7	A.M.	8:30	Assign #45
		8:45	#31 Film and problem solving
		9:00	Problem discussion
		10:00	Break
		10:15	#90 Problem solving
		10:40	Role playing
		11:20	Problem solving
		12:00	Lunch
	P.M.	1:30	#50 Film and problem solving
		2:15	Problem discussion
		2:30	Break
		2:45	#74 problem solving
		3:30	Problem discussion
		4:30	Assignment: #3 and #45

APPENDIX N

SUGGESTED INCIDENT RESPONSE SHEET

Suggested Incident Response Sheet Questions[*]

1. What seems to be the problem?

2. Why do you believe the problem arose?

3. What factors do you believe contributed to the problem?

4. What do you believe your immediate goal should be?

5. What are some alternative courses of action available to you in reaching your goal?

6. Which of the available courses of action would you take?

   Why?

7. Communicate your decision in writing exactly as you would in reality.

8. What are some alternative ways to prevent the problem from arising again?

9. What information did you find (if any) which was useful in better understanding the problem?

10. What other information would you like to have? How could it be obtained?

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[*] Suggested in part by work done by David G. Ryans in "Teacher Behavior Theory and Research: Implications for Teacher Education, Journal of Teacher Education, 3:274-93, September 1963.